MODERN METHODS

IN

PSYCHIATRY

BY

DR. J. NORMAN PACHECO

11th May 89

To Dearest Dominic

In memory of all

your kindnesses to

all of us and

particularly to my

Dad -

Sincerely

Ronald Parkes

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IN
PSYCHIATRY

BY

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PREFACE.

During the past decade or two the interest in mental disorders has grown to such an extent that a vast amount of advance has appeared in the literature on Psychology, Psychopathology and Psychiatry. The magnitude of these connected subjects appear to the average Medical Student and Practitioner to be so complex and tangled that an attempt has been made in this volume to condense it and place before them as simply as possible, a general view of all the modern aspects of the subjects. A departure from the customary practice of dealing with normal Psychology in the first chapters will be noticeable. Though acquaintance with normal Psychology is essential I incline to the view that what to the student and practitioner is more important is the recognition of the early signs of the Psychoses. An attempt is then made to deal with mental abnormalities according to the various stages of life commencing with Amentia in childhood. The book is merely a compilation of the most modern theories on, and modes of therapy of the Psychoses, in a very abridged form, and hence has no claim to any originality, except to give the reader an easy grasp of what is generally looked on as a dry or complex subject. The Author is indebted to his daughter Daphne for help in correcting proofs. and to Messrs. T. K. Iyer and K. Banerjee for typing the original manuscripts.

J. N. J. P.

To

The E. M. H.

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EARLY SIGNS OF MENTAL DISORDER
CHAPTER I.

The trend of modern psychiatry is towards the recognition of the earliest signs of any disorder affecting the personality or mental equilibrium of the individual, for it will be apparent that if we are to follow the road of modern mental hygiene which leads to prevention by early treatment, we must be able to read the danger signals of disease or defect effecting our patients' mind, at the earliest opportunity, to avoid a crash at the cross roads of life later on. It is not strange that the general public are loath to present themselves or their relatives for advice or treatment until the signs and symptoms of a fully developed psychosis are obviously manifest, or till the patient is beyond their management and control, when one considers that man's pride of his position as the lord of creation, prevents him from recognising that his mental faculties, which are his highest attributes, are disturbed. For to lose one's mind is to come on a level with the lower animals, to say nothing of incurring the ostracism of one's fellow men.

This delay is partly due to the fact that the general physician does not meet the premonitary, prodromal or earliest signs of psychoses. Further he often fails to recognise the subtle changes in a man's personality or behaviour because as a student he was taught the stereotyped text book descriptions of the fully developed disease.

Just like every other disease, psychopathological states have an insidious commencement, which may be so slight and illusive as to pass unheeded or passed over lightly. The detection of the early signs and symptoms then, should be the main aim of psychia-

try, for by early treatment we shall stem the advance of a state which spells unhappiness to the sufferer and a drain on the State's exchequer.

Just as the diagnosis of drunkenness is accurately made by the man in the street, the diagnosis of a fully developed psychosis is an easy matter for both physician and layman, but by then the patient's condition is probably so advanced as to be well nigh hopeless. The study of the early symptoms therefore is even more important than the recognition of the disease at the stage of certification.

The early signs of the various psychoses are to be found in the description of the particular conditions. It will be more convenient however to summarise them according to the following age groups, and from them be able to forecast possible modes of appearance as clinical entities.

(a) Infancy
(b) Childhood
(c) Adolescence
(d) Adult life
(e) Senility.

(a) Infancy.

At this early age we cannot expect to find any signs or symptoms of abnormal behaviour that can give us a clue to the developement of a neurosis or a psychosis at a later age, even in the presence of a marked family history of psychopathic inheritance. The mind of the newly born infant is undeveloped and at this period it has even been compared with that of an idiot. The difference however is that a "normal" infant has a potentiality for development that an idiot has not. Should however, the child be

born an ament there are unmistakable signs of mental deficiency especially in the grosser forms of defect. Barring any accidents during birth or any physical deformities such as hare lip or cleft palate, the infant who shows no interest in its mother's breast and is unable to suck if not sleepy or crying excitedly, should be viewed with suspicion. In the same way an infant that lies listless and takes no head of any external stimulus such as a bright light, or a sound, or differences in heat or cold, is probably defective. Pleasurable sensations such as tickling, crooning, bouncing or tasting a tittle sugar, should evoke the appropriate response of a smile, and similarly, opposite sensations should express displeasure, but the defective infant may accept both with indifference. Backwardness may be manifest if by the third month the head is not held erect, and by the sixth month if it is unable to sit up and to grasp objects. By the ninth month it should be able to stand unsupported, and to walk at twelve. Stigmata of degeneration should be looked for, such as misshappen ears, limbs, eyes, or palate. A microcephalus or hydrocephalus will be all too obvious. Examine the fundus for the cherry red spot of Von Tay-Sachs disease. Signs of cretinism or Mongolism should be looked for, as early treatment spells a favourable prognosis. The mongol can be detected at birth, but cretinism does not develop till the third or fourth month. Defects in the realm of speech will be noticeable at the end of 12 to 16 months, if it is a defective, and the persistence of baby language after this age is also a bad sign. Another common symptom of deficiency is convulsions. Infantile convulsions occur in (1) Microcephaly (2) Birth Trauma to the brain and its coverings (3) Encephalitis (4) Toxaemias (5) Spas mophilia. Epilepsy may be present from the first year and may be hard to diagnose, but if the first are periodic and are absent during a severe illness such as pneumonia, measles or fevers they are

more likely to be epilepsy, especially if there is a family history of convulsive seizures. The normal child should take an interest in the attention shown by mother or nurse in matters of hygiene, nutrition, dress, and play. The early months of life if not the early years, are spent in directing pleasure on to oneself. The child is essentially an egoist and has not learnt to direct its love or interests objectively. Hence any disturbance of its tranquility or comfort is met by resistance or negativism, which is expressed in refusal of food, refusal to go to stool, or to sleep. This is part of the rebellious reaction of the child and becomes frequent or habitual when he realises the stir he is creating and the distress he is causing mother or nurse. This behaviour is the outcome of nervous unrest, not its cause: To spank it now only deepens the rebellious spirit. In the act of defecation children often scream and struggle when put to stool or else will take unduly long over the act. This is simply because the anus being one of the primary erotogenic zones, its stimulation at stool produces a pleasurable state, hence the desire to prolong the act or retain the contents of the bowel. Memory traces of this are registered in the unconscious and in later life contributes to the character formation of the individual who now becomes parsimonious irritable and mean. The mental environment of the child is created by the mother or the nurse. If things go wrong, if there is constant crying or ungovernable temper, if sleep and food are persistently refused or if there be undue timidity and fearfulness, there is danger that seeds may be sown from which nervous disorders will spring in future. The nervous irritability of the child reacts on the mother who easily gets worn down by the additional strain of other household duties. It is possible to control the condition in both mother and child by the judicious administration of small doses of Bromide and Chloral.

(b) Childhood.

As the child passes out of infancy it gradually approaches the conditions of adult life and by now has learnt to put away fractiousness, naughtiness, ungovernable fits of temper, shyness, inconsolable weeping or inexplicable fears. If these persist to older childhood we should suspect evidence of definite neuropathic tendencies, which urgently call for attention. Parents too forget easily that abnormal behaviours have their existence not in the child itself but its evironment.

The original cause for the many misfits and failures of later life can be traced to early childhood, when if intelligence and character are not moulded, if it has not learned to control its inner feelings in spite of the obstacles and dislikes it has to face daily, abnormal behaviour is the result and may by the keystone of later neuroses. Some of the main symptoms of nervousness in older children are the following. Fears at night, of the dark, or of being left alone.

Nocturnal eneuresis.

Temper tantrums.

Screaming and unmangeableness.

Shyness and babyishness.

Fears of school. Truancy.

Lying and Thieving.

Last but not least mental defect of a milder grade of feeble-mindedness may now be quite apparent. Curiously enough most cases of waywardness come from homes where too much care rather than neglect is practised. Mental defect is manifest in backwardness in learning at school, abnormal and excessive emotional reactions, restlessness, defects of intellect and of interest in one's person or surroundings and abnormal habits, as thumb sucking and autoerotism.

A closer estimation of defect may be obtained by eliciting the intelligence quotient (I.Q.)

Some children may be unduly apathetic and give way to day dreaming or be excessively shy. A lack of attention and flow of interest brings on defect of memory, a feeling of inferiority grows with this, and shyness or aloofness is a result.

A common symptom for which children are brought for advice is eneuresis. The trouble is seldom serious and the main cause of this, in addition to the nervousness that is usual, lies in faulty management which deprives the child of all confidence in his own powers of control and is a means employed of calling the attention of the parents, generally, the mother. The prognosis is usually good. Numerous forms of treatment are usually adopted, which as a rule instead of bringing relief only accentuate the condition and the child's sense of diffidence and shame. To deprive a child of fluid, to awaken many times at night, to tilt the foot of the bed, to prescribe at random some medicine or operate on the prepuce or tonsils or adenoids, to appeal by bribes or to threaten, will seldom cure. The case should be treated with sympathy and care. Encouragement and advice act by suggestion, which may be given in the waking state or in a course of hypnosis and this method will be found to act quickest and best. The influence of suggestion is shown by the behaviour of the child when removed to hospital or to a friend' s house for a day or two when the eneuresis promptly stops.

During childhood the autoerotic impulse being strongest, the commonest bad habit for which advice is sought is masturbation. The knowledge of pleasure in stimulating the sexual organs arises usually accidently through some local irritation. With this pleasure grows interest in the functions of the genitals and occasion-

ally children are initiated by other children who indulge in sexual "games", or by adults, especially servants. Soon the child becomes a slave to the impulse and secretly practises masturbation. The result is the child becomes introverted asocial and untruthful and each act brings a load of guilt and shame. If caught in the act, the distress is more, especially if there is a foolish threat of castration, damnation, or insanity. Such unwise threats may be the seeds of a neurosis to wreck the whole life of the individual. It should be remembered that autoerotism is after all only a stage in the normal sexual development of everyone, for with full sexual maturity the impulses of this transitional period should no longer exist and are sublimated through diverse channels. The danger is that many are fixated or anchored at this stage of life. The attitude towards such a child should be one of tolerance. He must be helped to realise that he is guilty of no sin but a breach of good manners, that it is a disgusting habit like nose picking. When an appeal is made to the child's moral sense that the practice will not sap one's health but one's character later, and if cautious instructions be given on the functions of the sex apparatus and that the child should seek diversion and pleasure in higher and nobler activities in life, much may be gained. The common fallacious idea is that masturbation leads to insanity; on the contrary it is often a symptom of mental defect or disorder.

It is not strange that the curiosity of children about sex matters should be roused at this period. It is a healthy sign it should demand explanations of the puzzles of creation, and to stifle such curiosity is a mistake, for the child will certainly seek a solution, which may be often a wrong one. The vast majority of children is kept in ignorance but whenever a child seeks enlightenment do not turn it away with a cuff but answer it frankly and naturally in simple language with some simple examples from

natural history. During childhood, apart from mental defect, there are no mental disorders that make their appearance so early, with the exception of epilepsy and encephalitis lethargica. One of the most striking post encephalitic sequelae in children is the sudden and complete alteration of character and temper. The child who before illness was exemplary, bright and happy becomes idle, mischievous, irritable, and impulsive. Lying, thieving, sexual immorality and even inclinations to murder may appear in children of the most respectable and regulated families. Together with this appears intellectual defect. This disease is a cause for alarm to the authorities, for its appearance in older children and young adults leads to an increase in juvenile delinquency and even suicide.

(c) Adolescence.

This is one of the critical periods of life, for during pubescence and adolescence the endocrine balance is disturbed by the intrusion of the internal secretion of the sexual glands. For all practical purposes insanity occurs for the first time at this period of life. Leaving aside the effect of heredity, there is in insanity almost always a physical cause but usually combined with other psychic factors. The physical cause of adolescent insanity is the physiological disturbance produced by the internal secretions. The mental cause is the change in the social status of the young adult who has to adjust himself to the problems of life and of these the most disturbing during these early years are those connected with sex. The commonest disorder of this period is dementia praecox. Long before the disease is fully manifest there will be noticed certain definite but mild and fleeting changes in the personality which is described by Jelliffe as the "predementia praecox personality". Emotional instability is perhaps the most marked

change and consists of phases of exaltation or depression which may alternate with great rapidity or be prolonged. The individual becomes gloomy, silent and morose. One of the first signs may be the display of laziness, an inclination to spend most of the time in bed, gazing into space, day-dreaming. He draws away from friends and relatives, is unresponsive and shows little interest in anything. If an occupation is found, he either loses it or gives it up and drifts to another. Among females, hysterical symptoms are common such as rapid changes of mood and disposition, outbreak of temper or the opposite, uncontrolled giggling. Vague aches and pains all over the body are complained of and menstruation may be irregular. Love affairs are easily made and broken and the individual is profoundly effected by this situation. Intellect is by no means impaired but lack of concentration for any length of time produces weariness or inability to read, write or perform any task. At the same time there appears an indifference to parents and relatives. The patient will sometimes complain of states of fatigue, headaches, or neuralgias. This is often mistaken for neurasthenia and all manner of treatment prescribed. A careful consideration of the symptoms should put the physician on his guard about the onset of schizophrenia. A rare condition but one which nevertheless must be kept in mind, is juvenile general paralysis which may appear at the second decade. It is a progressive encephalitis due to congenital syphilis. The child may be mentally deficient from the first or show signs of mental and moral deterioration for the first time at puberty. Epileptiform attacks may be present. A Wassermann test of the blood and spinal fluid is required to differentiate the disease from encephalitis lethargica.

(d) Adult life.

It is here that the physician meets the development of most of the psychoses and here again most errors in diagnosis arise.

Mental disorder does not make a sudden dramatic appearance. Since the boundary between sanity and insanity is ill defined we must expect here every degree of abnormality from the whims of the mild eccentric, the vague aches and pains and anxieties of the psychoneurotic or borderline case, to the fully developed delusions and irrational behaviour of the acutely insane. Too often the early signs of a psychosis are treated lightly as neurasthenia with a bottle of medicine, or advice to "pull yourself together" or take a trip to the country or seaside. Whenever a case presents symptoms which are commonly termed "functional" it is most essential that a thorough physical and mental examination should be done. Every physical disease has its mental aspect and very often may be the expression of mental disharmony. If, practitioners would systematically ask each of their patients "Are you worried or anxious about anything"?, they would often be given a clue that something more than meets the eye, or any lengthy laboratory test can reveal, is wrong. Careful case taking is then indicated and every aspect of the patient's life investigated. Remember the number of psychoneurotics in the general population is very large. They are to be found in every hospital and consulting room. As a rule one hysteric has many physicians and the reason for this is that the psychogenesis of their malady is never analysed, whereas that is just the solution they are looking for in vain.

Psychoneuroses or minor psychoses must be distinguished from the true insanities or major psychoses and in the early stages this may be difficult for the line of demarcation again is very narrow. One important point however is that the psychoneurotic has an insight into his condition, knows and feels he is ill and asks for help even though he clings to his illness, while the psychotic not having that insight declares stoutly that nothing is wrong and rationalizes his symptoms. A prodromal symptom of

early mental disorder is insomnia and it is fairly constant and in treating it the basic cause physical or psychological must be attacked. More often it is an uneasy unconscious rather than a "conscience" that keeps one awake.

Next to this comes abnormal fatiguability. The day begins with a feeling of weariness which increases with every activity as the day goes on. In its train it brings lack of concentration, irritability, headache, anxiety and depression. Whenever you have a case of anxiety or depression it is well to remember it may be the beginning of true melancholia which may go on to suicide. The beginning of a psychosis may be noticed by friends or relatives who will complain of the changes in the patients character conduct or habits. Changes in the patients normal temperament is an early sign. When the exuberant individual becomes silent and gloomy or vice versa, it is certainly an important indication that some mental conflict is going on. He may become careless about his dress, be disinclined for work, play or company, neglect his home or business and squander money recklessly. The power of self criticism diminishes and the patient is unable to form accurate judgements regarding his work or conduct in general. The power of inhibiting the primordial instincts is diminished. This may lead the hitherto respectable person to commit indecent acts in company or indulge in obscene language. When the staid, respectable business man of middle age begins to show the above changes the physician should always suspect the beginning of General paralysis of the insane.

In the case of Manic depressive psychoses the early symptoms of mania are insomnia, restlessness, irritability and querulousness. Loquaciousness may be combined with incoherence Hyperprosexia or stimulation of attention is noticed in the flight of ideas. Often mild and fleeting hallucinations or delusions may be the first symptom, the patient complains of noises in the streets

or next door, and fear that he is being watched by everyone. Judgment and reason become impaired and it increases as the pathological process of deterioration goes on. In the early stages of melancholia, the insomnia is associated with states of anxiety, morbid fears from unknown or unseen sources. The patient takes no heed of anything around, is mute and morose or given to weeping or moaning. The absence of tears is in contrast with the amount of grief. Food is often refused and much of their day is spent in gloomy introspection. Sometimes in acute cases any impulsive act or violence as a homicidal attack or attempt at suicide may be the first sign of manic-depressive psychosis. The vast majority of suicides are incipient mental cases, the basic factor being depression brought on by some delusional ideas regarding past sins, unworthiness and moral or financial ruin. Delusions of grandeur and power are common in the excited states and maybe the first signs.

In Paranoia, delusions form the main clinical picture and they are systematised, closely assimilated to all the facts of consciousness, supported by arguments aud lavish illustrations from experience. Apart from the particular delusion the patient may pass for normal but in time conduct is governed by the delusional idea and may come in conflict with society. Any form of delusion may occur in paranoia but the persecutory type is the commonest. The patient fixes the origin of the persecution on some person or body of persons and may retaliate by bringing law suits or even assaulting his supposed persecutors.

Delusions of reference are also common. Even if the delusion is not translated into conduct it is a serious sign of disorder. Still it does not deprive him of his civil capacity of arriving at proper decisions concerning his state.

Morbid projection of one kind or another is the most constant feature of the paranoid state. It is because conduct is not

impaired till the disease has progressed that the paranoic does not attract notice in the early stages when treatment should be begun.

(e) Senility.

As age creeps on, it is natural that as the physiological processes deteriorate the mental faculties too decline. Some persons show this decline earlier than others but as a rule symptoms develop gradually and do not appear before the age of sixty. If however there has been a previous attack of insanity, a relapse is likely at this critical age. Hence acute mania may recur even late as 70. One of the early signs of oncoming dementia is loss of memory. Owing to the inability to register impressions, and the weakness of the faculty of attention there is amnesia for recent events. The earlier experiences being more firmly registered it is not surprising that the events of childhood are easily recalled and often recounted. With this there is a growing tendency to be easily confused, mental work is an effort, and hence irritability and impatience is a characteristic of old age. Since the interests are narrowed, the wants are few and there is a gradual regression to childishness. The sleep rhythm may be disturbed, that is, they sleep by day and are wakeful or restless at night. In some the powers of inhibition are lowered and one of the first symptoms is loss of moral or ethical feelings. This may lead respectable old gentlemen to commit nuisances, indulge in exhibitionism or make improper advances to strange ladies in public. The sexual instinct in other words has its final fling. These cases however are leniently dealt with by the law courts.

At first the aged are egotistical and critical but soon they lose interest in everything and their personal habits deteriorate. They become wet and dirty, careless of toilet and dress. In the presenile type of dementia (Alzheimer's disease) dementia is profound, appears early in the course, and is progressive.

CHAPTER II

MENTAL DEFICIENCY

There are three ways by which the human mind may be affected by defect, by disease and by degeneration. Each of these processes occur at a definite period in the stages of life.

Mental defect or amentia is the result of an inherited lack of germinal vitality and hence is present at birth. This condition manifests itself the earliest. Its percentage is the highest. Mental disorder or insanity is the result of disease, pathological processes, inherited or acquired, which manifests itself from puberty to the 4th or 5th decade. Its percentage is midway between the former and the next state. Mental Degeneration or Dementia is the result of permanent deterioration of the mental faculties as a result of disease or decay of the cerebral neurones. With the exception of the precocious type, it is the last to manifest itself and is generally seen from the 6th decade onwards. The percentage of this state is the least. These three definite clinical entities are not to be looked upon as inseparable, but may merge one into another. A mental defective may have a psychosis (disease) superimposed, and end finally in dementia. The chronic mental diseases have their ending in dementia. Every single human individual who lives long enough certainly passes through several stages of mental changes. At birth he is an Ament as he is without a mind, but not a true Ament, as the normal child has a potentiality for development. With normal development he becomes a Synment that is with a mind. At some period of his life as a result of disease, drug, or dismay, he may temporarily become a Dysment, that is insane, but under treatment may regain his state of normal mentality. Lastly with advancing age, the natural end result being decay and dissolution, man becomes a physiological dement.

These various stages will now be discussed in order.

Mental Deficiency or Amentia.

Mental deficiency is a state of incomplete mental development, the changes in the brain varying from macroscopic defect to miscroscopic variations in the quality and quantity of the brain cells. The only satisfactory approach to a clear differentiation between normal and subnormal mental development is from a biological aspect. Since the essential purpose of mind is to enable the individual to maintain independent existence in a normal environment to which he adapts himself, one who is unable so to do must be considered abnormal or defective. Tredgold defines Amentia as "a state of incomplete mental development of such a kind and degree that the individual is incapable of adapting himself to the normal environment of his fellows, in such a way as to maintain existence independently of supervision, control or external support."

The Mental Deficiency Act of 1927 defines Amentia as a "condition of arrested or incomplete development of mind existing before the age of eighteen years, whether arising from inherent causes or induced by disease or injury.

1. Etiology.

The causation of amentia is due to two main factors (a) intrinsic and (b) extrinsic.

The former produces the clinical varieties known as Primary amentia and the latter, Secondary Amentia. *The intrinsic factors* that produce amentia are the following which cause a vitiation or defect of the germ-plasm.

(a) Neuropathic inheritance: The incidence of insanity, epilepsy or other mental abnormality is generally high in the family history of Aments.

(b) Alcoholism: Parental alcoholism by itself is not the cause of amentia, though it may be symptomatic of an essentially unst-

able nervous organisation; it is usually coupled with a latent neurotic diathesis. There can be no doubt that alcohol, like drugs, taken habitually during pregnancy must act adversely on the immature brain cells, and this is fully supported by laboratory experiments on animals.

(c) Tuberculosis: This disease *per se* does not conduce to mental defect unless the mother is in an advanced stage of the disease during pregnancy. Tredgold found that 34 per cent of cases investigated had a history of familial tuberculosis.

(d) Syphilis: The presence or absence of a neuropathic taint largely influences the subsequent mental development but the virus of syphilis can effect the parental germ cell and impair its development.

(e) Disparity in the age of the parents. If both stocks are healthy, this factor is of minor importance. Langdon Down found that in 23 per cent of idiots there was a disparity of more than 10 years in the ages of the parents.

(f) Consanguinity: The marriage of near of kin though not prejudicial is likely to be so if there is a latent neurotic or psychotic taint.

The extrinsic factors-are those, that produce some somatic modification by acting directly upon the foetus or infant.

(a) *Before birth*-(i) Abnormal mental or physical condition of the mother during pregnancy.

(ii) Injuries to the foetus in utero.

(b) *During birth*
- (1) Abnormal labour
- (2) Primogeniture
- (3) Premature birth

(c) *After birth*
- (1) Trauma
- (2) Toxic infections
- (3) Convulsions
- (4) Defective Nutrition.

II Degrees of Amentia.

There are three degrees of mental defect recognised. The highest grade is Feeble mindedness, the next grade is Imbecility and the lowest, Idiocy. Each of these grades may also be subdivided into high, medium and low grades. It must be remembered that no hard and fast boundary line can be drawn between these grades although each of these varieties have certain clinical characteristics. The Mental Deficiency Act 1927 defines:-

(1) **Idiots**-as persons in whose case there exists mental defectiveness of such a degree that they are unable to guard themselves against common physical dangers. This is the lowest degree of mental defect and may be conveniently divided into two grades (a) Partial or incomplete and (b) complete or absolute.

Characteristics- Mentally there is gross defect of attention and perception. They are unable to articulate or at most utter a few monosyllables. They are lacking in the fundamental instincts of nutrition and self preservation and hence are unable to protect themselves against common physical dangers. They may be imitative but display no curiosity, are apathetic, mild and inoffensive. They are childish in their affection to their attendants and also capable of mischief and aggression. Most of them indulge in thumb sucking, rocking or other ceaseless automatic actions. They are incapable of scholastic education, cannot wash or dress themselves and have an intelligence quotient (I . Q .) of 25 i . e . a mental age of not more than 35 months.

Physically they are mishappen and are sometimes barely human in appearance. Stigmata of degeneration are most pronounced, many suffer from paralysis, athetoses and epilepsy. They usually succumb to epilepsy or Tuberculosis. 5% of all aments are idiots.

(ii) **Imbeciles** are defined as persons in whose case there exists mental defectiveness which though not amounting to Idiocy is yet so pronounced that they are incapable of managing themselves or their affairs, or in the case of children of being taught to do so.

Adults have a general intelligence of between 3 and 7 years.

The mental development of imbeciles as a class stands a little higher than the idiots. They are able to protect themselves more, but are unable to support themselves.

Mental condition : They can talk a little but cannot carry on a rational conversation. They can carry out simple commands, run small errands and be taught kindergarten lessons. Perception, memory, imitation and attention are far below normal but a little higher than that of idiots. They have an I . Q . between 25 and 49. Most of them can wash, dress and feed themselves under supervision. They are usually mild and harmless, the tool of others and more preyed upon than preying.

Physical condition: Stigmata of degeneration are invariably present. Speech is thick, stammering, squint and left handedness is often met with. Epilepsy and palsies occur in a large proportion. They are often stunted and ungainly and have a typical vacant expression. 20% of all aments are imbeciles.

(iii) **Feeble minded** are persons in whose case there exists from birth or from an early age mental defectiveness not amounting to imbecility, yet so pronounced that they require care, supervision and control for their own protection or for the protection of others or in the case of children that they, by reason of such defectiveness appear to be permanently incapable of receiving proper benefit from the instruction in ordinary schools.

These are the highest grade of mental defectives and apart from some minor physical abnormality and the usual stigmata of degeneration, many of them might pass for normal individuals, in

intelligence and character. Being unable to compete with the rest of their society they are unable to live independently. It is these defectives (Morons) who fill the ranks of ne'er-do-wells wastrels inebriates, vagrants, beggars and prostitutes.

Mental condition : (a) Feeble-minded children.

The chief feature is a low general intelligence and subnormal educability, lessened ability to learn from experience and incapacity to adjust themselves to their surroundings. As a rule these children are unable to reach the 3rd or 4th standard in school and their I. Q. varies between 45 to 70. Clinically they are divided into two groups:

(1) The STABLE group are placid, attentive, inoffensive, affectionate and can be trained for minor occupations in a simple capacity under supervision.

(2) The UNSTABLE group have insanity or mental instability added on to their defect. They are highly emotional, excitable, irritable and mischievous. They are also restless, chattering and habitual law breakers or recidivists. Lying and thieving is common and their sexual instincts are not controlled. The number of such children is usually 1 per cent of the school population.

(b) **Feeble-minded adults**. These are by far the most numerous of the three grades of defectives. Their mental capacity extends over a wider range, whilst some are placid, dependable and mentally stable, others are highly emotional, unreliable and unstable and require care supervision and control.

Perception, attention, memory and imagination are all defective. In short the feeble minded displays little curiosity, is unable to learn by experience and is lacking in common sense or 'gumption'.

Incidence—The investigations of Dr. Lewis in 1929 revealed that 5.61 and 3.20 per 1000 of total population in rural and urban areas in England and Wales are adult defectives. The incidence in the two sexes is about equal. There are no statistics of India's defective population but a conservative estimate based on western standards of ascertainment places it at about two millions !

Moral Defectives.

These persons were formerly classified as moral imbeciles and are defined as those in whose case there exists mental defectiveness, coupled with strongly vicious or criminal propensities and who require care, supervision and control for the protection of others. This is a small but important class of ament, because of their added criminal tendencies. In outward appearance and physique they are little different from normal persons but the general mental state is that of an imbecile or feeble-minded. Educational attainment may be good and they may even excel their fellows in certain directions. Some of the special senses may be acute but he is wanting in moral sense and wisdom. His behaviour is antisocial, because of this, together with his strong impulse towards wrong conduct. Although the number is small the legal recognition of this class is important. Doctors and Magistrates should realise that this condition being one of feeblemindedness the sooner the term moral deficiency or moral imbecility is discarded the sooner will they realise the futility of encumbering courts and prisons with these social unfits.

These defectives can converse rationally, are witty and quick at repartee. They are selfish, devoid of affection, shame or self esteem, in addition they are defiant and incorrigible. They are artful dodgers, pathological liars and swindlers. Their pla ns for the future are futile and they are unable to learn from the past.

Diagnosis: The history of the case is important. A family history of enuresis or psychoses is usually found. Alcoholism,

epilepsy, encephalitis lethargica or other symptoms of degeneracy should be recorded. The difference between the purely vicious criminal and the moral delinquent is that the latter is childishly ingenous and seldom covers up his tracks and often has no motive for his deeds.

There are 4 types of moral defectives:—

(a) *Mendacious.* These have the slightest excuse for lying and thieving and do so without any thought of the results.

(b) *Sexual.* Many prostitutes belong to this class. They are obscene, perverted and allow their passions free play.

(c) *Querulous*—These are not unlike paranoics and are usually abusive, aggressive, annoying and cantankerous.

(d) *Skulking*—These are characterless wastrels, mean malingering and mendicant. Tramps and beggars belong to this class. Tredgold estimates, that the proportion of criminals who are mentally defective is between 10 and 20 per cent.

Prognosis is not good. True moral defect just like mental defect cannot be cured. The best that can be hoped for is that with strict supervision he may be managed at home. Most often this is not possible. They should be sent to a special school or an industrial home where they can be taught through moral persuasion to conduct themselves as efficient citizens.

Idiot Savants

These are mental defectives whose special senses or aptitudes are developed to an extraordinary degree. These include many musical and mathematical prodigies, "linguists", calculators and mechanical geniuses. They may have an extraordinary sense of vision, smell and touch, unusual manipulative ability or an astounding memory for records, dates and figures but at the back of it all they are mentally unstable, childish, emotional and defective

in other respects, although their special ability may be sufficient to allow them to make a success in life.

III. Physical characteristic and Stigmata in Amentia.

It is only natural to expect that when the germ cell is vitiated either in quality or quantity the end result must be a distorted product. Hence in addition to the mental defect practically all aments possess some abnormal physical features or stigmata of degeneration.

The commonest are:—

(1) Changes in the size and shape of the skull. The normal circumference is 22½" (inches). A deviation of more than 2½ inches either way is abnormal. Hydrocephalic and acromegalic patients are usually mentally defective. Platycephalic (Flat- top) and acrocephalic (dome-shaped) types are usual.

(2) *Facial anomalies*: These include platyrhinism (which is normal in negroes) snub nose, underdevelopment of the chin, prognathism, heavy lips or a misshapen mouth. The tongue may be large and fissured.

(3) *Limbs*;—May be deformed or asymmetrical. Paralysis of one or more limbs is sometimes common among idiots. Webbed or supernumerary fingers and toes are usual.

(4) *Eyes*:— Coloboma, Retinitis pigmentosa, Epicanthic fold, high degree of refractive errors, strabismus and juvenile cataract are common.

(5)*Ears*:—Variations in size and situation, absent or adherent lobule, abnormal or absent convolutions; prominent Darwinian tubercle.

(6) *Palate*:— Gothic (high steep arch) moorish (horse shoe-shape) low and broad. Cleft palate and hare-lip occur rarely in aments.

(7) Teeth :—May be irregular and prominent and are prone to early decay.

(8) Skin :—course and greasy, warts, moles and naevi present —adenoma sebaceum is a cutaneous eruption mostly met in epileptic aments. It consists of an overgrowth of sweat follicles and small capillaries and has a "butterfly" distribution on the face and cheek.

IV—**Clinical Varieties of Mental Deficiency.**

Since the causation of amentia is both intrinsic and extrinsic the result must be classified as primary and secondary.

1) *Primary* :—due to defective germ plasm. Over 75% belong to this group which includes.

Simple or genetous Idiocy
Microcephalic Amentia
Mongolism
Amaurotic Family Idiocy.

(2) *Secondary* :—due to acquired or environmental causes or disease.

This group includes :—

Traumatic
Inflammatory
Hydrocephalic
Syphilitic
Epileptic
Cretinism
Isolation.

Simple or Genetous Idiocy :—Due to a simple lack of development of cortical neurones. There are no special features other than the usual stigmata described previously.

Microcephalic Idiocy. The chief feature is the small elongated skull which is usually less than 17 inches in circumference.

It is neither atavistic nor accidental but an "inherited blight" localised to the skull and the brain.

Pathology.—The chief feature is a general hypoplasia of the two cerebral hemispheres but not the cerebellum. The convolutions are of simple pattern, microgyria is present and porencephaly not infrequent.

The brain weighs one fifth the normal.

Microscopic examination shows a great defect of cortical cells while those present are imperfect and irregular.

Mental State is one of Idiocy. They are harmless and tractable and affectionate. Speech is usually defective. Behaviour is childish. They can be employed at simple work.

They rarely attain an advanced age.

Mongolism.—The chief characteristic is the facial resemblance to the Chinese or Mongol race. 50 per cent of children diagnosed as defective during the first year of life are Mongols. It is usually found in the last of a large family and the mother is generally older than the father.

The essential cause is the lack of some specific hormone or combination of hormones or of some Vitamin which vitiates the developing embryo.

Physical signs.—The skull is small and round, the face flattened, the nose squat and the maxilla under-developed. The eyes are typically Chinese. Strabismus is often present. Tongue is large and fills the mouth. It is course and fissured. The hands are broad, the fingers short and flabby. There may be webbed or supernumerary fingers and toes. The hair is dry, stiff, and scanty, the skin is dry and rough. The abdomen is prominent, Genitalia are rudimentary. They may be mistaken for cretins but Thyroid therapy has no effect.

Mental State :--As children they are placid and inert, but sitting-up, walking and talking is delayed. They are of the imbecile type. They are cheerful, good tempered and rarely have any bad habits. The milder grades of defect may be taught elementary reading and writing. Most cases die before puberty, usually of phthisis. Pluriglandular therapy may help to prolong life.

Amaurotic Family Idiocy.

(Tay-Sachs. Disease).

A rare and invariably fatal condition found usually in Jewish children about the third month. The patient shews muscular weakness of the back and the neck and the sight is affected. Retinal examination shews a whitish grey patch on the macula lutea and a cherry red spot on the fovea centralis. The infant gradually gets weaker and complete blindness follows. Prognosis is bad as the disease rarely lasts to two years.

Secondary Amentia

The most important of this group is Cretinism. It is an infantile form of myxoedema which may be endemic or sporadic.

The exciting cause is unknown but the result is the absence or under development of the Thyroid gland. There follows a deposit of mucinoid substance in the subcutaneous tissues, and deficiency in the cortical neurones. The cretin is fat, puffy and dwarfed. The skin is coarse and dry, the voice is hoarse and abdomen is proturberant.

Features are broad and course, lips thick and the tongue large and protruding. Pulse and respiration are slow and the temperature is subnormal.

Mental state :—Any grade or defect may occur. Speech is delayed, and deafness often present. Cretins are lethargic, placid and least troublesome of all aments.

Treatment :—Thyroid Gland extract should be given early in doses of ½ grain b. d. for a child of six months. This must be continued and increased at the rate of a grain a day for each year of the child's age up to a daily maximum of 15 grains.

EPILEPTIC AMENTIA.

Epilepsy in childhood leads to feeblemindedness and even idiocy. The mental deterioration is due more to epilepsy than actual neuronic defect. The condition is progressive inspite of treatment, prescribed in ordinary epilepsy among adults. It is not unusual however to find epileptiform fits occurring in primary amentia.

HYDROCEPHALIC AMENTIA.

It is a result of either tubercular or syphilitic meningitis. When the condition exists before birth the child is usually still born.

Hydrocephalus produces a thinning of the brain tissue which gradually gets destroyed until the two hemispheres resemble a large cyst. There is general enlargement of the skull, the greatest circumference being at the level of the temples and the measurement is between 25-30 inches. Such patients are usually emaciated, paralysed, deaf or dumb, mentally they are either idiots or imbeciles but are usually mild, affectionate, quiet and tractable. There is no relation between the size of the skull and the degree of mental development.

ISOLATION.

It is a common experience to find the city-bred youth brighter smarter and more cultured than his country bred cousin and this is because education and experience in the city is far more advanced than in the village. Education in its widest sense, therefore is necessary to mental development and to withhold education be

it scholastic or social, is to produce backwardness. Similarly if an individual is deprived of one or more of his special senses he is ill-equipped to receive external stimuli. Hence his mental development will be retarded from want of experience. Deaf-mutes are usually mentally defective.

In the case of amentia due to sense deprivation the condition is not pathological but secondary. In deaf-mutism however, there is probably a concommitant cerebral derangement, resulting from endocrine disturbance. Treatment is mainly educational and the the outlook is hopeful. With special care and training a good deal can be done, as in the celebrated cases of Helen Keller and Laura Bridgman.

V. Diagnosis of Amentia.

The problem differs somewhat according to the age of the patient and is best considered at three life periods (1) infancy (2) school age (3) adolescence.

I. Infancy. At this age the practitioner will usually be consulted because the infant is backward. The main points to look for apart from physical stigmata, and having excluded any physical conditions like malnutrition, rickets, tuberculosis, blood diseases, encephalitis, worms etc, are torpor, indifference, and absence of restlessness. continual peevishness, sleeplessness and inability to suckle properly. By the third or fourth year amentia is more marked as there is a history of backwardness in walking, talking and cleanliness.

The persistence of baby language after three years and the inability to feed itself should rouse suspicion.

II. School Age.—In addition to the above history evidence is available of the child's inability to respond to simple school instruction. The Binet-Simon tests should be carefully applied to ascertain the intelligence quotient (I Q.).

These tests are not infallible, but a far more accurate estimation may be arrived at by the application of tests directed to certain particular mental processes, such as accuracy of observation, capacity for comparison, discrimination, judgment, prevision and planning, also testing the range of knowledge regarding common things and events of his environment. In addition to general knowledge the child's general abilities and interests must be tested.

III. Adolescence.—Idiots and imbeciles are easily diagnosed. As far as scholastic ability goes the feeble minded may pass for normal and yet prove defective from the social standard.

The life history must be carefully taken and the tests mentioned above applied. Care should be taken to exclude, adolescent instability, adolescent General Paralysis, Dementia Praecox and the after effects of encephalitis.

The Binet-Simon tests and the modification of Terman are used to ascertain the mental standard of defectives and are based on a comparison with the mental capabilities of normals of different ages ; for instance, a defective aged 10 with the mentality of a child of 5 is said to be "mentally 5". The intelligence quotient (I.Q.) How-

ever, is the ratio of the mental age to the chronological age and in the above case is $\frac{5}{10}$=·5.

Idiots usually have a mentality of a child of 3, imbeciles from 3 to 7, while adults with a mentality of 12 to 15 are "backward" or feeble minded.

The I. Q. of an idiot is roughly less than a quarter, that of an imbecile up to half, and feeble-minded between half and three quarters. These tests are done on a special form which has 6 tests for each year and for which 2 months is given as marks for each correct answer.

Year III.

Points to parts of body, nose, eyes, mouth, hair, names, familiar objects, key, penny, watch, pencil, enumerates 3 objects in a picture.

Gives sex.

Knows surname.

Repeats 6 syllables: "I have a little dog" etc.

Year IV

Compares lines

Discrimination of forms, square, circle, triangle.

Counts four pennies.

Copies a square.

Comprehension 1st degree, "What must you do when sleepy, cold. hungry."

Repeats four digits: 2468, 3579, 7261.

Year V.

Comparison of weights.

Colour discrimination.

Aesthetic comparison, upper, middle, lower pair.

Definition of uses of chair, table, fork, doll, pencil

Three commissions.

Knows age.

Year VI.

Knows right and left-hand, ear, eye.

Detects mutilation in pictures.

Counts 13 pennies.

Comprehension 2nd. degree. " What's the thing to do ".

(a) " If it's raining when you start to school ".

(b) " If you are going somewhere and miss your bus ".

Knows values of coins.

Repeats 16 to 18 syllables.

Year VII.

Names fingers of both hands.

Describes pictures shown. Dutch home, Canoe, Post office.

Repeats 5 digits.

Ties bow knot.

Difference between stone, egg. wood, glass.

Copies diamond.

Year VIII.

Counts backward 20 to 0.

Ball and Field Test. The person is asked to trace with a pencil the path he would take, commencing from the gate in a round field looking for a cricket ball that is lost somewhere within the field.

Gives similarities, wood and coal, apple and peach, iron and silver —ship and motor-car.

Definitions: Balloon, Tiger, Football, Soldier.

Comprehension 3rd. Degree " What's the thing for you to do—

(a) "When you have broken something which belongs to some one else ".

(b) "If a playmate hits you without meaning to do it "

(c) "When you are on your way to school and notice you are in danger of being late ".

Year IX.

Date—Day of week. Month, Day of month—Year.

Repeats four digits backwards.

Rhymes: 3 rhymes for each word, as Day, Mill, Spring.

Arranges 5 weights in order.

Gives change (coins, paper or pencil not used).

Year X.

Points out absurdities in sentences as—

(a) A man said "I know a road from my house to the city which is downhill all the way to the city and downhill all the way back home.

(b) An engine-driver said that the more carriages he had on his train the faster he could go.

(c) Yesterday the police found the body of a girl cut into 18 pieces. They believe she killed herself.

(d) There was a railway accident yesterday but it was not serious. Only 48 people were killed.

Reads a simple news item and repeats substance from memory.

Comprehension 4th degree—

"What ought you to say when some one asks your opinion about a person you don't know very well".

"Why should you judge a person more by his actions than his words".

Repeats 6 digits.

Form Board (Healy-Fernald Puzzles) To be done 3 times in 5 minutes.

Year XII.

Defines abstract words, such as, Pity, Revenge, Charity, Envy, Justice.

Vocabulary of 40 different words said in three minutes.

Reads jumbled sentences and puts them in order as :

" For the started an we country early at hour ".

" To asked paper my teacher correct I my ".

" A defends dog good his bravely master ".

Interprets fables (" What lesson does that teach us.") such as Hercules and the Waggoner, The Fox and the Grapes, The Farmer and the Stork, etc.

Gives similarities between three things.

Snake, coin, sparrow,

Book, teacher, newspaper.

Wool, cotton, leather,

Rose, potato, tree.

Year XIV

Vocabulary of 50 words.

Gives difference between a President and a King.

Power, Accession, Tenure.

Solves problems of fact as—

(a) A man who was walking in the woods near a town stopped suddenly, very much frightened and then ran to the nearest policeman saying that he had just seen hanging from the tree.....a what ?

(b) My neighbour has been having strange visitors. First a doctor came to his house, then a lawyer, then a priest. What do you think happened there ?

Arithmetical reasoning ; (a) If a man's wage is 20 s. a week and he spends 14 s. a week, how long will it take him to save 300 s. ?

(b) If 2 pencils cost 5 d. how many pencils can you buy for 50 d. ?

(c) At 15 d. a yard how much will 7 feet of cloth cost ?

Clock Test : Points to time : 6-20, 8-10, 2-45.

Year XVI (Average Adult).

Vocabulary 65 words.

Interpretation of Fables.

Difference between abstract words.

Laziness and idleness; Evolution and revolution ; Poverty and misery ; Character and reputation ;

Repeat six digits backwards—

Repeats 28 syllables.

(a) Walter likes very much to go on visits to his grandmother, because she always tells him funny stories.

(b) Yestetday I saw a pretty little dog in the street. It had curly brown hair, short legs and a long tail.

Problem of enclosed boxes—gives the total.

One large box containing—

(a) 2 smaller, 1 inside each

(b) 2 smaller, 2 inside each

(c) 3 smaller, 3 inside each

(d) 4 smaller, 4 inside each.

Year XVIII (Superior Adult.)

Vocabulary test—75 words.

Binet Simon paper cutting test.

Repeats 8 digits.

Repeat thought of passage read out.

Repeats 7 digits backwards.

Ingenuity Test—(a) A mother sent her boy to the river to get seven pints of water. She gave him a 3 pint vessel

and a 5 pint vessel...Show how the boy can measure out exactly 7 pints without guessing the amount. Begin by filling the 5 pint vessel.

(b) Same as above, except 5 and 7 to get 8 (Begin with 5)

(c) Same as above except 4 and 9 to get 7 (Begin with 4)

VI Prognosis and Treatment.

Amentia is incurable nevertheless considerable improvement may result from appropriate treatment. The expectation of life in defectives is decidedly less than that of normal persons and is in inverse proportion to the degree of defect.

With the exception of Cretinism treatment is in the main neither medical nor surgical but educational. Treatment means care and control. The ament must be trained to behave as a decent member of society and to make the best use of his limited faculties. Tuition must be adapted to capacity. If he is unable to master the "three Rs." he must be trained in home or industrial work or minor trades and occupations.

The Kindergarten methods of Froebel and Pestalozzi as well as the Montessori methods of tuition should be employed.

VII Modes of admission.

In the absence of a Mental Deficiency Act in India or special homes or institutions for defectives, the only mode of bringing this class under Care and Control is to resort to the Indian Lunacy Act and admit defectives in Mental Hospitals together with insanes. This is undesirable and objectional. The usual practice is to have a defective certified as an insane, either under a reception order on petition or an emergency order by a Magistrate.

Defectives may also be admitted as Voluntary patients but this is unusual. In the first case the relative makes an applica-

tion to the Magistrate asking for a reception order for the admission of the patient, together with the application the relative or guardian presents two medical certificates by two different doctors, certifying the mental state of the patient. The Magistrate then passes a reception order for the admission of the patient to the nearest mental hospital.

It is much better and easier to have the patient present himself voluntarily for admission or if he is unable to do so to have him admitted on the cognisance and responsibility of the relative or guardian.

CHAPTER III.

Minor Psychoses.

The psychoses consist of two groups, the Minor and the Major. The minor include :—

Neuroses: Neurasthenia and Anxiety States.
Psycho-neuroses: Hysteria and Obsessional States—
The Major psychoses include :

(a) The Biogenic psychoses
  (1) Manic Depressive Psychosis.
  (2) Dementia Praecox.
  (3) Paranoia.

(b) The Toxic psychoses.
  (1) Acute Confusion.
  (2) Alcoholic and Drug Manias.
  (3) Acute infections, Pregnancy and the puerperium.

(c) Psychoses associated with disease of the endocrines.

(d) Psychoses associated with patholigical brain diseases; General Paralysis, Tumour and Encephalitis.

(e) Traumatic Psychoses;

(f) Psychoses with Somatic Disease;

(g) Epileptic Psychoses.

Mental patients fall into two groups. One realise they are ill and are unable to carry on their activities and who seek treatment for relief, the other believe there is nothing wrong but whose conduct is so irrational that society intervenes to protect itself and them. Although every insane person is said to be mentally disordered, the converse does not hold good.

CAUSATION OF MENTAL DISORDER.

From the earliest times till the middle ages the insane were supposed to be possessed by devils, later on it was thought that the movements of the moon and planets affected certain individuals As medicine became a scientific study a score of causes mostly speculative were assigned to insanity.

Before considering the general etiological factors, the teaching of Modern Psychoanalytical Psychology must be taken into account. According to the Freudian school, mental disease is simply an adjustment of the personality to maintain the balance between pleasure and pain. Since our main desire is to avoid pain and maintain pleasure anything that upsets this aim produces mental conflict. Intrapsychic conflict is the essence of all mental disorders whether functional or organic.

The general etiological factors are divided into endogenous or inherent and exogenous or environmental.

The chief endogenous factor is Heredity. Neuropathic heredity follows the Mendelian law. It is not the disease but a predisposition to contract it under suitable conditions that is inherited.

Heredity is direct when either parent is mentally unsound. Collateral when the brothers, sisters or other near relatives are

effected, atavistic when distant relatives are or have been effected. Consanguinity per se does not breed insanity, provided both parties spring from healthy stock. Bachelors and Spinisters are more affected than married persons. The female insane population is higher than the male: In about 50% of all cases a psychopathic family history is obtainable.

Exogenous causes.

This may be direct or indirect.

Direct causes act by impairing the nutrition and metabolism of the brain.

The chief of these are alcohol, anodynes and drugs such as morphia, cocaine, Indian hemp, chloral, etc. Poisons such as, lead, arsenic ether, CO_2 etc. Toxins of acute diseases as Pneumonia, Typhoid, Influenza, puerperal fever etc. all act direct. Cerebral tumour, abscess, haemorrhage and even trauma may all produce mental symptoms. The virus of syphilis and encephalitis produce grave mental disturbance. Disease of the endocrine system accounts for a fair percentage of mental disorders. Indirect factors are mental stresses, short or prolonged, worries, shocks, domestic, financial, or social.

Overwork, education, religion and sexual intemperance are some times given as causes but rarely are the prime factors.

The Minor Psychoses.

These are divided into (a) The neuroses and (b) the psychoneuroses. They are also termed the "Borderline" states. The neuroses are the outward and visible sign of an inward invisible conflict between certain innate tendencies and the precepts imposed upon the mind by education, using this term in its widest sense, in accordance with the requirements of society. In the words of Freud "it is the result of a conflict between the Ego and

the id". According to him the mind is made up of three parts or strata.

(a) The **conscious** is the uppermost and includes all the experience that the individual is aware of at any given moment.

(b) The **fore-conscious** is the next which contains ideas, emotions and memories which are not in full consciousness but can be recalled by an effort, or easily as occasion demands.

(c) The **unconscious,** the largest part contains all memories and experiences which have been repressed or forgotten because they are painful or repugnant and are incompatible with the conscious elements. In it lie our inherent animal instincts, especially the sex instinct which is apt to come in confiict with our conscious ideas of morality and ethics that have been forced upon us by education or society.

In the main the force of the conscious is moral, that of the unconscious non-moral. Thus the mind may be compared to an iceberg, the visible one tenth being the conscious and the submerged nine-tenths the unconscious. The unconscious is not dormant but ever active and constantly exerts its upward pressure to reach the conscious but is kept down by a faculty or barrier known as the censor which acts through repression. If the barrier or censor is suddenly removed the unconscious will flow through, upset the normal contentment of the personality and cause the mind to become unbalanced. Thus it is in sleep and dreams when the censor is relaxed, painful or frightful ideas or memories push through, nightmare results and the sleeper awakes. The censor however has safety valves as it were, to let certain parts of the unconscious through, but only in a mild, disguised or distorted form. It is the

unconscious therefore that exerts its influence on the personality as a whole and expresses itself in dreams, symptoms of mental disorder, mistakes of omission and commission in every day life, in art, religion, wit and every phase of mental life. The unconscious can be reached or examined by Free-Association, word association and Hypnosis. Freudian Psychoanalysis is the examination of the unconscious through the process of Free association and the interpretation of dreams. According to Freud the origin of all mental energy, lies in the sexual impulses, but by sex he does not only mean lust and animal passion but also such higher feelings as Love and Family affection. This inner urge or "libido" passes through certain stages of development. The first is the auto erotic or stage of Narcissism. Up to the age of 5 the main interests of the child are centred on its own person. Lips, mucous membrane of the mouth, breasts and inner part of the thigh and anus are now highly sensitive and are known as the primary erogenous zones. The infant obtains gratification by stimulation of these areas and this is a form of masturbation. At the end of this stage, the genitals gradually become more sensitized and demand more attention. Should this not occur a neurosis or sexual perversion may result. This is also known as the Polymorph-perverse stage; until the genitalia acquire supremacy.

(2) The next is the stage of latency or Homo-sexual stage. Education at home and school now plays a part in directing the child's interests in behaviour, social rules and customs of decent life and play and work, etc. At the same time the child looks for a love object to transfer its affection which was originally on the parent of the opposite sex or a surrogate, to a person of the same sex.

(3) Puberty or the hetero-sexual stage is the last. The genital zone has now become the most important and there is now a cons-

cious seeking for a love object of the opposite sex outside the family circle.

If however the impressions of sexual experience in the earlier stages have been strong they are liable to reappear now and may persist. The subject is then said to be "fixated" at the narcissistic, anal-erotic or homo-sexual stage, and this fixation governs the whole conduct and character of the subject. The seeds of the neuroses are thus sown in infancy.

The Neuroses.

The Neuroses are divided by Freud into two types (a) the actual neuroses and (b) the psychoneuroses.

Whereas the actual neuroses are the result of abnormal stimulation or gratification during the current sexual life, the psychoneuroses are due to the mental processes which arise from the unconscious and comprise repressed impulses and memories of a painful nature which are striving for expression. This expression in the conscious takes the form of physical or mental symptoms which are a form of compromise of the unconscious conflict and represent an abnormal kind of sexual gratification. The root of a psychoneurosis therefore lies in errors in early infantile experiences.

The differences between a psychoneurosis and a psychosis, according to Freud, is that, the former is the result of a conflict between the Ego and Id, while the latter is due to a conflict between the Ego and the environment.

The actual Neuroses are divided into—

(a) Neurasthenia
(b) Anxiety Neurosis
(c) Hypochondria

The Psychoneuroses consist of—

(i) Hysteria

(ii) Obsessional neuroses.

(a) *NEURASTHENIA* is a condition of functional nervous disturbance in which the patient complains of unusual physical and mental fatigue.

Etiology.—The most important factors are prolonged physical and mental stress with insufficient rest. Hereditary factors must not be overlooked, physical strain, domestic and business worries, abuse of stimulants as tea, tobacco and alcohol; post-influenzal and Typhoid exhaustion may be contributory factors. In the Freudian sense the condition is a fatigue neurosis with autoerotism as its basis; masturbation is the prime factor of exhaustion, or in its absence, excessive nocturnal pollution.

Ernest Jones holds that the difference in the etiology between neurasthenia and anxiety neuroses is that in the former the afferent excitations are deficient and the efferent discharge excessive, while in the latter the afferent excitations are excessive, and the efferent discharge deficient.

Symptoms.—The patients complain of a number of symptoms for which there is no physical basis except in the so-called "Traumatic Neurasthenia" where an accident accentuates physical symptoms of pains, aches and even paralysis.

Somatic.—The main complaint is general fatigue, loss of appetite for food, work, or play; insomnia, sinking and fainting feelings, headaches and pressure at the Vertex, "Crawling" sensations over the body, tenderness of limbs and spine, tachycardia, pallor and cold clammy extremities.

The reflexes are usually exaggerated and the pupils more active but there are no physical signs of organic disease. Aches and pains are referred to every region of the body.

Mental— The patients usual story is inability to concentrate on anything. Voluntary attention is defective and he is disinterested in himself and his affairs. He is irritable, easily upset and liable to outbursts of temper or crying. He complains of loss of memory, sensitiveness to noise, "numbness in the head", a tight band round the temples. Volition is so impaired that he may spend weeks in bed and depression may lead to suicidal tendencies.

Diagnosis :— The term "neurasthenia" is too frequently used carelessly and the onset of more serious mental disorders over looked and be treated erroneously. It should be distinguished from :

(a) Dementia praecox— Although in the early stages there may be fatigue symptoms, loss of concentration, and vague pains, the key note is the atrophy of emotion, indifference to the future, distorted modes of thought, in addition to mutism and mannerisms.

(b) Melancholia is characterised by the distinctive attitude and rigidity, and the degree of depression is out of proportion to the circumstances. There is a lack of insight into his condition.

Melancholics are potential "suicides".

(c) Cerebral Tumour: Diagnosis rests on physical signs. Examine the optic discs, as headache and parasthesiae may be complained of in the early stages. Examine the blood for Wasserman Reaction in apparent neurasthenia in the middle aged.

(d) Hysteria: Here the paralysis, anasthesias, "fits" and higher suggestibility are distinguishing points.

Treatment. Don't fly to the Pharmacopoea although every known drug mentioned in it has been recommended to or tried by the patient. There is only one certain cure, i.e., psychoanalysis

but if this is not practicable, hypnosis with suggestion is the next best. Take the patient away from his usual surrounding to a nursing home, hospital, or to friends. Rest, good food company and suitable occupational therapy are as much as most neurasthenics can carry.

Traumatic Neurasthenia

Occasionally psychoneurotic disorders are precipitated by trauma. The injury itself is usually unimportant in comparison with the apprehension aroused. Sometimes there is no actual physical injury but only the emotional shock after a severe accident. Often the extent and seriousness of an injury cannot be determined for days or weeks and during the interval of suspense the patient may too carefully scrutinize very symptom. The late War produced numerous cases of neuroses arising from stress or injury varying from shell-shock downwards especially in persons with a neurotic predisposition. In civilian life, Railway, motor or factory accidents, produce the largest number of cases. This condition should be regarded essentially as an emotional state dependent not on any physical injury but on a number of psychological factors. The knowledge that an injury has been sustained is an excuse in war to return to the front, and in civil life raises the rosy hopes of a compensation. In the latter case symptoms often abate after a satisfactory settlement. It is therefore of medico-legal importance to show that the symptoms are an exaggeration of the true state of affairs.

A very careful physical examination must be followed by a psychological analysis to discover a previous neurotic tendency.

The main symptoms are general or localised tremors, the exaggeration of knee jerks without ankle clonus or Babinski's sign, tachycardia or disordered action of the heart, praecordial pain

dependent as much on emotion as on exertion, general debility and weakness not in keeping with the general state, impaired memory and failure of power of concentration. The expression is at times apathetic but mostly anxious. In some cases reflex palsies set in and these do not follow any anatomical plan like hysterical palsies.

Treatment :—Consists not in advising plenty of exercise in the fresh air and a bottle of medicine but in fathoming the contents of the patient's mind and an honest endeavour to reestablish a healthy mental outlook. Waking, as well as hypnotic suggestion and suggestion based on the indications of psycho-analysis are eminently successful and the only correct way of showing the patient his true state.

B. **Anxiety Neuroses.**

This is a state in which the emotions of fear or anxiety are aroused by inadequate stimuli. In the face of danger or impending danger, fear and anxiety are normal reactions and a mode of adaptation to environment. Now, since the autonomic and endocrine systems are called into play when the emotions are manifest the hypersensitiveness of these systems are responsible for the production of the anxiety states. The Freudian theory is that morbid anxiety occurs when there is sexual stimulation without gratification ie. excessive and unrelieved sexual tension. Prolonged engagements, coitus interruptus and widowhood are conditions where the sexual impulse finds little outlet. So also when one partner is sexually frigid. Physical and mental stresses also play a part. "Stage-fright" and "wind up" are forms of great anxiety.

The physical signs are those of fear and of hyperthyroidism. Flushing, perspiration and a loss of weight are common, accompanied by palpitation, tachycardia, praecordial angina, sense of suffocation tachypnoea, polyuria, frequency of micturition and

nocturnal emissions. In women various menstrual irregularities occur. Tremors, giddiness and even mild convulsions, may be present.

The mental Symptoms are the exaggeration of the normal physiological accompaniments of fear. The patient is usually depressed, irritable, restless and intolerant of noise and light. Sleep is poor and is disturbed by nightmares. Sometimes the content of the dreams are frankly sexual. Not uncommonly the symptoms of fear are referred to some particular organ and the whole attention is focussed on it, with the result that that organ manifests various disorders.

Every event and expectation in the patient's life is met with fear. The fear of insanity or sudden death is often expressed. The condition may last a few months or become chronic.

Treatment.—Having paid attention to the general health and obviated any organic derangement, the quicker the patient is subjected to psycho-therapy the better. Removal from his usual surroundings to hospital or a nursing home is often beneficial. Each mental and physical symptom must be traced back to its origin and explained. When the sexual life is at fault most and cannot find satisfactory gratification, the patient must be encouraged to sublimate it into useful social activities and the cultivation of hobbies. The essential thing for the doctor in general practice confronted with a case of neurosis or psychoneurosis, is to get to know his patient. This cannot be done in an hour or even in a day. When after applying every physical and laboratory test, he can find nothing wrong it is his bounden duty not to dismiss his patient with foolish advice to "take a trip" or buck up" but to consider that something serious is at the root of the trouble. Give no opinion or advice at this stage but take a detailed life history. A few simple questions as "Are you worri-

ed or unhappy about something ?" Are you contented at home or work ?" will soon make a patient unburden his worries to a sympathic listener. Be patient even if his history is interminable, but be firm and tactful with questions. He will tell you his reactions to life, from infancy, at home, in school, in youth, in adult life, his own household and with society at large. It will give him confidence that you know and understand his case and once begun he will go on. Never fail to ask the patient about his sexual life in the past or the present—all his minor worries, failures, disappointments, loves, hates and in most cases it will be amazing. This unburdening of his troubles alone will bring the patient a deal of comfort and here the physician must take on the role of a sympathetic friend and adviser. Your nervous patient is likely to be intelligent, so your speech, manner and your personality must impress him. You must encourage him to face his illness as the result, not of superficial physical causes, but of his maladjustments and conflicts in life, and therefore that they are mostly from his unconscious mind. You will urge him to get away from all the ideas that have grown up in him and that life can be worth while though happiness cannot be bought. Discuss with him the best solution of his acquiring a happier existence, be it in the sexual, family, or social sphere. Where suggestion, persuasion and encouragement or even hypnosis do not alleviate the symptoms, it will be necessary to resort to psycho-analysis,

(C) Hypochondria.

In this condition the patient is unduly concerned about the state or functions of his internal organs. There is a certain amount of anxiety and general fear about his health. He may anticipate disease in general or fear he is about to get cancer, syphilis or phthisis. A physical examination reveals little or nothing abnormal--The hypochondriac complains of vague feelings

of discomfort in the head, abdomen, pelvis or thorax and the description of the pain is fanciful. Some will insist they have gross disorder with their organs and induce surgeons to correct a visceroptosis, the position of the uterus, or remove it and the ovaries, or remove an appendix. They usually have a good collection of prescriptions for all sorts of ailments, little realising that all their somatic symptoms are due to a transference of interest from the primary sexual zone upwards and are really a form of autoerotism. The condition is closely allied to fixation hysteria and paranoid dementia. The treatment is the same as that of the anxiety neurosis and hysteria.

THE PSYCHONEUROSES.

Hysteria

From the earliest times down to the beginning of the 19th century, it was thought that hysterical symptoms were set up by disorders of the womb, hence the name. It was Charcot who first conclusively demonstrated that hysteria was not a disease peculiar to women and taught that hysteria was due to the presence of a fixed idea in the patient's mind that some part of the body is diseased. No part of the human frame was immune from attack, hence he styled it "la grand simulatrice" of all sorts of organic diseases. He made use of hypnotism to cure his patients. Janet, a pupil of Charcot considered that amnesia or absent-mindedness was the one common factor underlying all hysterical phenomena and was the first to explain these to the existence of a "subconscious" mind. According to him "hysteria is a mental disease belonging to the large group of diseases due to weakness,-to cerebral weakness—characterised by a weakening of the faculty of psychological synthesis, an abulia, a contraction of the field of consciousness and by a tendency to the dissociation and the

emancipation of systems of ideas, which by their synthesis constitute the personality", or in other words, "hysteria is a form of mental disintegration characterised by a tendency towards the permanent and complete undoubling (dedoublement) of the personality". By tracing out each symptom to its origin and building up again the mental content to a more coherent whole and helping the patient to readjust his point of view in the light of the facts presented, Janet was able to help his patients to recovery.

Babinski defines hysteria (pithiatism) as a "pathological state manifested by disorders which it is possible to reproduce exactly by suggestion in certain subjects and can be made to disappear by the influence of persuasion (counter--suggestion) alone." The reason for this suggestibility or the origin of the particular symptoms however is not given. On the question of the relation of emotion to hysteria he holds that "when the human soul is shaken by a profound and sincere emotion there is no room left in it for hysteria".

The Nancy School, including Baudouin and Coue, however, have taught that the main cause of hysteria and other neuroses is auto-suggestion. Persuasion and judiciously applied countersuggestion are the main points in their therapy.

It was not till 1895, however, when Sigmund Freud of Vienna published together with Breuer his "Studien Uber Hysterie" that a correct and scientific theory of the cause of hysteria was given. Freudian psychology centres mainly on the working of the unconscious and the two principal concepts the enunciated are the law of psychic determinism and the doctrine that mental phenomena are capable of a psychological explanation without reference to processes occuring in the brain.

This will be further elaborated in the Chapter on Psycho—Analysis.

Aetiology—This may be summed up in Freud's own words *"A passive sexual experience before puberty"*. This is the specific aetiology of hsyteria. Again "the occurrence at any time of life of an experience in some way touching on sexual life which then becomes pathogenic on account of the generation and suppression of a painful affect does not bring about hysteria. These sexual traumas must on the contrary occur in early childhood (before puberty) and they must consist in actual excitation of the genital organs (Coitus like processes)". In every case of hysteria analysed carefully and over long periods this emotional experience was traced as the bed-rock of hysteria. These experiences were preserved in the unconcious, like foreign bodies and through their constant dynamic force for expression in the conscious, dissociation was the result. The final principle of Freud's hypothesis is the principle of conversion.

The strangulated affect, the unreacted-to emotion belonging to the dissociated state which has been repressed finds its way into bodily innervation thus producing the motor or sensory phenomena of hysteria.

A neuropathic heredity can be traced from 50 to 60 per cent of cases. No class is immune but the Jewish and Latin races are more liable to hysteria. In civilian practice females are more affected but the late War showed that it occurs equally in men and women. It may appear in communities in epidemic form as in "Revivalist" meetings "Seances" or after some great calamity as earthquakes, shipwrecks etc. In the East "latah" is a form of hysteria. Young people are more liable than the old. The symtoms appear usually after some physical or emotional shock.

Symptoms. These are best considered under two heads mental and physical. Owing to the complexity of the disorder which may manifest itself in disturbance of function of any part of the body or of the mind, it must be remembered that all the symptoms described below are not necessarily present in any one case. Indeed there may be only one or two physical or mental signs or symptoms and no more. **Physical symptoms**—Practically every organic disease may be simulated and these may be summarised under three heads:

Somatic, (b) sensory, (c) motor.

(a) Somatic— Dyspepsia—diarrhoea, constipation, vomiting, anorexia nervosa, phantom tumour, aphonia, cough, hic-cough, haemoptysis, tachycardia, pseudo-angina.

(b) Sensory—Pains of every kind, anaesthesia, hyperasthesia, deafness, hyperacusis, amaurosis, loss of smell or taste.

(c) Motor—Contractions—tremors, paralyses, tics and convulsions.

Of these the most common are anaesthesias and paralysis. They are not in accord with anatomical distribution but rather follow the mental concept of a hand or foot or limb or side of the body and they may be transitory or shifting.

The convulsions in hysteria (hystero-epilepsy) usually come on after some strong emotional reaction. An aura may be present. In the tonic stage there may be extreme opisthotonos like that in tetanus followed by leaping or struggling with purposive movements, tossing the head, screaming, talking or singing. Consciousness may be impaired but is *not lost.*

The diagnosis from epileptic and malingering fits is shown in the following table :—

	Epilepsy.	Hysteria.	Malingering.
Consciousness	Lost	May be dazed but not lost.	Normal.
Pupils	Dilated during fit.	Normal.	Normal.
Tongue	Often bitten.	Normal.	May be bitten to simulate real fit.
Restraint	Necessary to prevent accident.	May be necessary to control violence.	Not necessary.
Onset	Rapid and sudden, falls heavily, unconscious.	Usually after some emotional excitement. May fall slowly into a dazed condition.	Always under conditions when he may gain sympathy Falls with care not to injure himself.
Duration	A few minutes.	Much longer.	Variable.
Urination & Defecation.	Usually soils his clothes.	Seldom.	Never.
Conjunctival Reflex.	Absent.	Present.	Present.
Recovery	Moderately rapid.	Very variable.	Very rapid after object has been gained.

Hysterical paralysis may simulate any form of organic brain or spinal lesion hence great care must be taken in excluding true organic disease. The best of clinicians may stumble when confronted with hysteria.

A careful history will show that the onset of paralysis followed some emotional shock. Functional groups of muscles and movements may be involved instead of those governed by a single spinal segment or nerve trunk. Even in the flaccid type of paralysis the deep reflexes are never abolished and the electrical reaction of degeneration is never present. Neither is Babinski's sign found. Hysterical paralysis may easily be mistaken for disseminated sclerosis or sub-acute combined degeneration of the cord.

Like paralysis, hysterical contractions may develop suddenly or sometimes a few days after a minor accident, anaesthesia of the whole or part of a limb and one-half of the trunk is also commonly present. Here, too, the affected area does not correspond to any definite nerve or segmental supply. Janet's test for detecting hysterical anaesthesia is to ask the patient to say "yes" when he feels the prick of a pin or a touch and "no" when he does not. The hysterical subject will say "no" when the anaesthetic area is touched.

Parasthesia or perversion of sensation in the form of haphalgesia or allocheiria is sometimes present. In the former variety the patient complains of severe pain, when certain particular objects are applied to the skin whilst in the latter when a stimulus is applied to one part the pain is felt at the same spot on the opposite side of the body.

Hyperaesthesia is one of the commonest complaints of hysterical patients. Tenderness may be present at any site but usually along the spine, top of the head, over the breasts, ovaries, or stomach or appendix. All these physical disorders are essentially symbolical gestures on the part of the patient who produces them by the aid of suggestion in his attempt at *flight into disease* as the easiest solution of an unconscious conflict. The following

are two typical examples. A strong healthy young man suddenly developed an acute spasmodic torticollis of the left side for which no cause could be found. He was on the verge of suicide when every imaginable form of treatment had been suggested or tried and failed, After analysis and light hypnosis he recovered completely when it was shown that his torticollis to the left was a symbolical "turning away" from his wife when he transferred his affections to another woman. His wife used to sleep on his right.

A young ship's officer suddenly developed complete aphonia after a terrific storm at sea when he was in grave peril. The aphonia enabled him to quit the sea and at the same time compensate a death-phobia. Numerous such cases occured during the great War whereby the flight into disease such as paralysis was a compromise between one's sense of duty and the instinct of self-preservation.

Mental Symptoms— The usual attitude of a patient with any of the physical symptoms given above is one of contentment and is comparable to that of a child when it "schemes" from school on the slightest illness or pretext. Should however he be unable to select unconsciously a somatic disability he flies into mental symptoms and the high road of flight from reality in the mental region is "forgetting".

The chief varieties of mental symptoms thereofore are amnesias, fugue, somnambulism, trances, deliriums, hallucinations, phantasy formations and emotional attacks of great intensity. When somatic symptoms have been improved or removed and that only after a struggle to give them up, the ordinary symptoms of anxiety may supervene. A marked assumed invalidism for which they demand sympathy is an obvious feature. They are

often childish, emotionally unstable and due to deficient self-control apt to giggle and cry on the slightest pretext. All Janet's studies of hysteria centre on the problem of the trance state which he terms somnambulism which he says is due to disassociation of consciousness which means that the stream of consciousness is divided or "split off" into independent currents no longer combined into one harmonious whole, i.e., exempt from the control of the personality. The classical example of somnambulism or sleep-walking is depicted by Shakespeare in the fifth act of Macbeth. Somnambulisms differ from fugues in that the former come on with sleep and as a rule the patient does not wander very far. In both somnambulism and fugue there is no memory of the event. Amnesia is the criterion of dissociation. Fugues are fairly common and many of the cases of lost memory reported occasionally in the newspapers are of this character.

An extreme type of dissociation or double personality is the classical one of the Rev. Ansell Bourne or the fictitious case of Jekyll and Hyde. Here in the same individuals are two or more personalities totally different and independent of each other.

In the amnesias of hysteria there is a definite wiping out or blank for a definite period of time, months, days or years. The determining factor of dissociation is explained dynamically, by Freud, as being due to a conflict of opposing forces or complexes within the personality.

Being emotionally unstable hysterics are liable to outbursts of anger or sulleness. Hallucinations are fairly common among them and recognised as such arising within oneself. Psychotic patients however insist that hallucinations have objective existence. Women are usually worse at the menstrual periods, they may be excessively irritable or morose, or there are bouts of uncontrollable laughter which may end in tears. They are usually

During the War a method known as Kaufmann's system of "shock" treatment was used with excellent results in cases with pronunced somatic symptoms. It consists in giving painful electric shocks to affected parts.

There is not a single drug in the whole pharmacopoeia that can influence hysteria and yet practitioners everywhere prescribe all manner of drugs to say nothing of operations and appliances, indiscriminately. The sooner the profession realise that hysteria and the allied neurosis are essentially of psychogenic origin to be dealt with by psychotherapy alone, the sooner will the great army of psychoneurotics be relieved more of their pain, and less of their purses.

The Weir-Mitchell treatment which was in vogue formerly and is still used in toto in medical backwaters, is here mentioned to be discarded.

Obsessional Neurosis.

Bleuler defines obsessions or compulsive notions as ideas which continually obtrude themselves against the patient's will with or without external causes, the content of which however is recognised as incorrect except in states of strong affects.

Hack Tuke says that "Imperative ideas are morbid suggestions and ideas imperiously demanding notice the patient being painfully conscious of their dominance over his wish and will.' Mercier styles obsessions as "parasitic mechanisms."

Janet grouped this condition under the heading psychasthenia and described the associated feelings of anxiety and distress as "agitations forceés". The main feature of the obsessional neurosis is the investment of the various mental processes with a feeling of compulsion as though the patient is impelled against his will by an external force and is unable to resist it. There is a

certain resemblance between obsessions and instincts. In both fulfilment is accompanied by a feeling of satisfaction and if thwarted give rise to mental unrest.

Obsessional neurosis is a defensive propitiatory ritual expressed in some form of symbolism which at the same time usually both satisfies an infantile and unconscious wish and seeks to remove an intolerable feeling of guilt.

Freud defines the condition as follows: "Obsessions are the symbolic expression of childish wickedness that the patient has either not yet abandoned in his heart or for which he has not forgiven himself; they represent unresolved conflicts. In them both the buried wishes and the forces of repression are manifested not, as in hysteria, by the construction of a compromise formation but through successive symbolical representation of the different sides of the conflict". According to him they are disguised self-reproaches connected usually with some sexual incident in early life. The doubts and indecision arise from conflict between parental love and hate. Both Freud and Ernest Jones have found a high developement between hate and anal erotism as the specific characteristic of the obsessional neurosis which develops in the following stages:—

(i) Period of childish sexual experiences.

(ii) Sexual maturity with memory of (i) above and development of reproach and feeling of shame and guilt which becomes partially repressed.

(iii) Revival of the memories in disguised form as obsessions with displacement of affect on to the substitutes in the form of fear, etc.

A fundamental state of doubt, an incapacity for decision, results from the primary conflict between love and hate in child-

hood and the compulsion is an over-compensation for this state of doubt.

This neurosis effects males more than females and in a large proportion of cases a hereditary neurotic predisposition is found. Impaired physical health and fatigue and any mental stress aggravates the state.

Mental Symptoms— In normal individuals obsessions in a mild form do occur, such as a tune that "runs in head" or doubts as to whether a door is really shut or a letter is in its correct envelope. A person with such doubts remains uneasy until he reassures himself by testing the cause. The neurotic patient however has complete insight into his condition, realises the nature of the obsession as something alien to his personality. Mentally he may be above the normal in intelligence. They are diligent and conscientious, but timid and not sure of themselves and have a tendency to moods of depression and mild unconditioned anxiety. As a rule patients recognising the incorrectness of the obsession struggle *against* it, unlike the delusional patient who struggles *with* the idea. Gradually the obsession obtrudes on his entire waking state and interferes with his normal activities and any attempt to fight against it only causes distress so that he has to yield to it for temporary relief.

The obsessions may be in the form of (a) ideas, (b) fears, or phobias and (c) acts or impulses.

(a) Obsessional ideas:— Any kind of idea may obtrude itself, it may be a tune, a phrase, the idea of a funny face or a story Sometimes disgusting or immodest or blasphemous thoughts may. persist or it may be in the form of questions on religious, scientific or social topics, such as, "Is God Omnipresent?". "Why the Rainbow has seven colours?' 'Why is black used for mournings'

etc. Anything which may raise a doubt may be a stimulus. Religious ideas are often connected with sexual ones which cause distress. The most trivial matters are questioned. The scrupulous are persons who are always weighing their acts according to their consciences fancying they may be doing wrong.

(b) Obsessional fears or phobias may similarly be of any variety. They are fears of definite objects or situations, such as, metals, animals, open or closed spaces, heights, disease, dirt, darkness, etc. The fear or obsession is persistent and tends to govern his intellect, though the patient fully realises the unreasonable nature of his thoughts. One of the commonest is the case of females who experience intense fear in the presence of animals, especially small harmless ones like mice, beetles, frogs lizards, and spiders. All these are established sexual symbols, hence the unconscious affect is transferred from the fear of sexual assault on to the objects which symbolise the phallus in the unconscious.

The following is a list of some of the phobias often met with in this neurosis.

Acrophobia	... ...	Fear of heights
Agoraphobia	... ...	Fear of open spaces.
Aichmophobia	... ...	Fear of sharp objects.
Claustrophobia	... ...	Fear of closed spaces.
Crimnophobia	... ...	Fear of precipices
Coprophobia	... ...	Church diarrhoea.
Eurotophobia	... ...	Fear of blushing
Mysophobia	... ...	Fear of dirt
Nyctophobia	... ...	Fear of darkness
Pathophobia	... ...	Fear of disease
Zoophobia	... ...	Fear of animals.

The patient reacts very strongly to these phobias partly by avoiding all occasion of coming in contact with the object of the fear and by acting in the sense of the phobia. For instance, a person afraid of disease or contagion will wash his hands frequently and everything he uses, even a letter from the post is wiped and fumigated before being touched. One patient used to occupy half a day having a bath.

(c) Obsessional impulses or acts. These may be in any form. They are actions which the patient is compelled to do; there is no fear attached to it, but the impulse is irresistible and if not acted on or thwarted produces uneasiness so that the individual is forced to carry out the impulse which may interfere with the normal occupations.

They may range from the repeated performance of apparently meaningless acts such as counting the steps of a stairs, or slabs in the pavement, touching every lamp post in the road like Dr. Samuel Johnson; to more serious impulses to steal, set fire to objects, to expose oneself in public, to drink excessively or to touch every female in the street. These morbid desires are sometimes termed "manias" but are not to be confused with the psychosis mania. Relief is sometimes obtained by complying with the impulse. In Kleptomania there is the imperative impulse to steal no matter how trivial or unnecessary the article may be. It is found more among women and is often met in those with disorders of the sexual organs. The act of stealing is accompanied by feelings of distress and is resisted. Shame and terror at the crime committed causes sudden attempts to hide it. When this occurs in a middle-aged man, one should always suspect general paralysis for it is often one of its first symptoms. The law, however, does not look favourably on a plea of irresistible impulse

nevertheless such offenders who are victims cannot be considered guilty.

Obsessive impulse to suicide and homicide too are not uncommon. Such impulses may also be present in the Manic depressive psychosis. Suicidal impulses are very strong and frequent in melancholia. In some patients their impulse is to touch everything they pass by, doors, chairs: persons, etc. (Folie de toucher). This condition is also met with in some cases of dementia praecox. These impulses being symbolical, the psychological explanation of this mechanism is as follows. Washing manias are expiatory acts for moral lapses so also is mysophobia due to a fear of moral fall.

Prognosis.—The course of compulsion neurosis is a very dragging one. Many cases are extremely intractable. The older the patient and the longer the treatment has been delayed, the more unfavourable is the outlook.

Treatment.—Practically all that has been said on the subject of hysteria holds good here, but as the prognosis is not favourable here, treatment of obsessional states is a thankless process. Physical measures are useless. This neurosis is extraordinarily productive, as one symptom is given up another takes its place. Since this state is essentially psychogenic in origin it is particularly well suited to treatment by psycho-analysis and the results are more striking here than in hysteria—In the early stages a case can be treated at home. Insomnia must be corrected and the essential thing is to establish rapport between doctor and patient and gain his trust. Children under the supervision of a sympathetic nurse or tutor can be educated into thoughts and habits of a healthy nature and can be stimulated to turn their interest to active utility. In adults, as a rule, removal from home and friends

should be insisted on and if in a nursing home or mental hospital constant attention to correct abnormal behaviour, occupation, exercise and social activities may help the process of psycho-analysis, which must be commenced at once. Thus conflicts can be removed and explained, the patient sees his acts in their true light and may be able to sublimate his actions to higher and better utility.

CHAPTER IV.

Dementia Praecox.

Emil Kraepelin, was the first to introduce the term which he applied to a group of signs and symptoms met with chiefly in adolescence. It is characterised by gradual mental deterioration ending in dementia, manifested by "a loss of the inner unity of the activities of intellect, emotion and volition in themselves and among one another." In short, being of biogenic origin, Dementia praecox is simply dementia antedated in youth, instead of its proper place in old age where it is natural as the end result of decay and dissolution. The condition is also termed Schizophrenia which means a splitting of the mind.

Aetiology: The most important factor is heredity. Any psychopathic state in the parents or grandparents manifests itself as dementia praecox in the off spring at puberty. It is Nature's provision of eliminating the unfit at an earlier age. If they escape Amentia the next pitfall is Dementia Praecox, the two states may be combined or follow one another. Usually any stress or strain of life, bereavement, loss, shock, love affair or parturition upsets the weakened personality and ushers in Dementia Praecox.

The Freudian conception is that the condition is a regression to childhood. When the patient is unable to face the hard world of Reality, he flies back to the auto-erotic stage of sexual devolopment where he is happier in a world of phantasy and day-dreaming to which he clings. Adolf Meyer suggests that the shut-in personality which constitutes the essence of the disease orginates in habitual faulty modes of reaction to experience. Jung taught that given a basic psychopathic predisposition, introversion, i.e., a deviation of interest (Libido) from the outer world on to oneself, was the result when the subject was faced with some stress or

insurmountable obstacle in life. The resulting mental disturbance produced secondary organic changes. Mott's discoveries of changes in the endocrines were not conclusive that they were the primary cause of the mental changes. Though its usual to meet the disease usually between the ages of 15 to 25 it is frequently seen even as late as 40. No race is exempt and the sexes are equally effected, Masturbation, as popularly supposed has no connection with the causation, rather is it symptomatic of it.

Pathology. The post mortem changes in the brain in confirmed cases show wasting and degeneration as found in Dementia and senility. Alzheimer found a gliosis of the deeper layers of the cortex. The ductless glands reveal well marked changes of atrophy. The testes cease to form spermatozoa and the tubules are atrophied. In the ovaries the primordial follicles are much degenerated and few in number. The follicles are replaced by an overgrowth of fibrous stroma. The Pituitary and Thyroid gland are also infiltrated with fibrous tissue. Hypoplasia of the cardio-vascular system and excess of lymphoid tissue and the presence of antiferments are sometimes found.

Prodromal symptoms: The changes in conduct may be gradual or sudden. Usually there is a history of peculiarities of thought, feeling and conduct dating from the earliest years such as sulkiness, touchiness, obstinacy, undue shyness, timid and suspicious. Some may be dull and backward in school while most are of average intelligence and even brilliant. Some cases begin with a subtle change in disposition and temperament. The steady worker becomes negligent and irregular, throws up one post after another without giving any reason. He becomes devoid of effort for work or play, becomes more erratic, careless, seclusive, moody, spends most time in bed and may complain of vague illness. At this stage the case is often erroneously diag-

nosed neurasthenia. There may be a previous history of some shock or a stress such as failure in an examination, loss of a relative, or a love affair. On the other hand the onset may be sudden and take the form of acute excitement or depression simulating manic depressive psychoses. Although there may be outbursts of apparently meaningless laughter, crying or impulsive behaviour the keynote of the condition is an atrophy of the emotions, characterised by a loss of natural affection and indifference to the present and the future.

There are four varieties of the disease.

Simple
Hebephrenia
Katatonia
Dementia Paranoides.

Simple.-The chief symtom in this form is loss of interest and initiative. It occurs in adolescence and in backward individuals. Emotional defect is greater than intellectual. Seclusiveness, carelessness of personal needs, and negativism are present. Hallucinations and delusions are not a prominent feature. The patient is self-sufficing and lives a life of placid contentment under supervision.

Hebephrenia.-The onset is usually at about 25 and males are more affected. The patient's previous history is one of sensitiveness, fastidiousness and moodiness. He gradually losses interest in himself and his affairs and becomes irritable and seclusive. The patient may be aware that a subtle change is coming over him but ascribes it to external influences. Apparent depression may be punctuated by outbursts of meaningless laughter. His whole waking life is filled with phantasies. Delusions of a fantastic order are common. Hallucinations are also present, and as a result his conduct becomes impulsive. Speech is often incoherent

or limited to the repetition of senseless words or phrases (verbigeration). Mannerisms, gestures and antics are a usual feature. Conduct becomes degraded, but as dementia progresses the above symptoms become less marked.

Katatonia.—Is more usual in females at or before the age of 25. There are three varieties (a) Excitement (b) Depression (c) Stupor.

These resemble the states of excitement or depression of the Manic Depressive Psychoses but the typical motor symptoms of dementia praecox to be described below are the distinguishing characteristics.

(a) Katatonic Excitement—This is often mistaken for acute mania. It may arise de novo or be preceeded by stupor or depression. The patient is in a state of continual restlessness, is noisy, violent and destructive. Actions are sudden impulsive and reckless. He may assume statuesque poses, wriggle his body, clench his fists or hide his face. Negativism or the impulse to do the opposite of what is required is displayed in the refusal of food, refusal to shake hands, to dress or undress. Wanton destructiveness is a form of negativism, so also is mutism or functional dumbness. If not mute, he verbigerates i.e. repeats over and over again some word or phrase. He may also repeat anything that is said to him—(Echolalia). Speech may be confused—full of nonsense syllables or made up words (neologisms) or it may be merely of abuse and obscenity. He may also imitate the action of others (echopraxia).

Fantastic delusions and hallucinations are present yet perception, cognition, and memory for recent events may be normal. Emotion is in defect as he is unable to experience the normal feelings of joy, sorrow or fear. He may be dirty in his habits, dribble at the mouth or collect saliva in it or spit about copiously

The differential diagnosis from acute mania is as follows :—

Acute Mania	Katatonic Excitement.
Behaviour-Purposive-A state of exaltation or Euphoria.	Absurd, impulsive, or stereotyped.
Speech—Rapid flight of ideas, verbose.	Confused jargon, neologistic or mutism.
Negativism—Absent	Present in both speech and behaviour
Emotion—Exaltation—	Deficient or atrophied.
Sensation—Hyperaesthetic	Anaesthetic.
Hallucinations—May be present	—More usual.

(b) **Katatonic Depression.**—In the early stages is frequently mistaken for Melancholia. The patient is depressed, disinterested in himself and his milieu, becomes shy and seclusive and spends most of the day in bed or sits about idly, Insomnia may be present at first. He becomes mute or verbigerates, makes grimaces or gigles, and tends to stand in one position for hours. Flexibilitas cerea i.e., the ability to hold the limbs in any position in which they are put, for sometime, may be present. Somentimes the whole body is held rigidly. He may refuse food and all attention and is wet and dirty.

Persecutary and accusative delusions and auditory hallucinations are commonly present. The differential diagnosis from Melancholia is as follows.

Melancholia	Katatonic Depression.
Age—after 30	May appear at puberty
Onset—History of previous attacks	Insidious.

Depression—acute, out of all proportion to circumstances, Lachrymose and unconsolable.	More apparent than real. Apathetic.
Facial expression—Misery or of fear.	Grimaces, pouts, or is vacant.
Rigidity: Parkinsonian type, bowed attitude, arms adducted and flexed, gait and movements slow.	Uniformly distributed over whole body. Waxy flexibility present.
Mannerisms—absent.	Present.
Disposition—Suicidal	Rarely suicidal.
Prognosis—Recovery in a year or less.	Dementia progressive.

(c) **Katatonic stupor** is the end result of the previous attack of depression. The patient now becomes quiet reserved and more negativistic, mute and resistive. Volition is completely in abeyance. Sensation is diminished and painful stimuli unheeded. Vasomotor disturbances as peripheral cyanosis and oedema are common. Delusions and hallucinations are less in evidence. Slowly the patient deteriorates and is more degraded, memory fails, perception, congnition and attention diminish till dementia is profound. Occasionally there are remissions when the patient awakes to a little interest in himself, in work and play but soon relapses to his former apathy.

Dementia Paranoides—Is more frequent among women and appears between 25 and 35. It may begin like Katatonia with excitement or depression but the most prominent feature is the presence of delusions and hallucinations. The former are grandiose or persecutory and are constantly changing, not fixed or systematised as in paranoia, and are fantastic or childish. The hallucinations are mostly auditory. Patients ascribe their

condition to unseen enemies, wireless, electrical or atmospheric influences, that their brains are being picked, their thoughts read and that there is a conspiracy against them afoot. Mannerisms, antics aud the other signs of katatonia are sometimes present. In time the hallucinations fade away but the delusions remain as bizarre if any milder. They gradually become institutionalised and their interest in their environment and future diminishes and in the course of a few years dementia supervenes.

Diagnosis. It is important to recognise Dementia Praecox in the early stages as it may be easily and often is, mistaken for neurasthenia.

In dementia praecox there is usually a history of shyness, sensitiveness, laziness, emotional indifference and non-adaptability.

(a) The neurasthenic is easily fatigued at any mental or physical effort and is mainly concerned about his bodily discomforts but tries to overcome them and comes for help and advice. The schizophrenic if he has the same symptoms treats them as a matter of course, is resigned and apathetic about it.

This, with the mannerisms, impulses and conduct soon distinguish the precocious dement.

(b) Imbecility and Feeblemindedness: The previous history and the I. Q. will soon make the diagnosis clear but dementia praecox may be superadded and must not be forgotten.

(c) Manic-Depressive Psychoses—See the differential diagnosis under Katatonia.

(d) Delusional states :—Paranoia occurs usually in the fourth decade mostly in males. Except for the delusions which are fixed " the personality is not broken up and in other respects he may pass for " normal ". The Alcoholic psychoses and General Paralysis of the insane are excluded by the history; Physical

signs, Wassermann reaction and absence of mannerisms negativism and progressive apathy.

Treatment.—If more attention is paid to prevention, mental hygiene and prophylaxis it may be possible to diminish the number of admissions which cost the state more than any other disease. The study of the personality in early childhood, the correction of inadaptibility, instituting correct modes of behaviour with oneself and society, adjusting a faulty environment or overcoming little "barriers" in life is more than the whole pharmacoepia has to offer. When the disease has manifested itself treatment spells institutional "care and control". Apart from attending to the general physical state the main thing is to prevent rapid deterioration by systematic ward discipline in correcting faulty habits and behaviour; stimulate interest in oneself and the environment with work, play, and amusements to dispel indolence and apathy. In spite of the utmost care and control some cases show no response. Endocrine therapy is of little or no help but pyreto therapy by injections of Malaria or Sulphosin or by diathermy is of advantage in some cases.

CHAPTER V.

Manic Depressive Psychosis.

This disease was originally divided into two, Mania and Melancholia and described separately. The Modern view is that the two conditions are, only states of the one psychosis. Bleuler's view is that this syndrome is syntonic i.e., that the changes are essentially on the emotional side with little disintegration of the personality. As the symptoms of Mania and Melancholia however present different views, it is usual to describe them separately but it must be understood that the two states being phases of the same disease, usually follow one another or may be separated by a lucid interval. Several combinations of these three states may occur.

The insane are not exempt from the law of periodicity which is a normal characteristic, indeed this psychosis may be viewed as an exaggeration of the normal variations of mood.

Etiology.—This is a pure psychosis. There is nothing abnormal to be found in the brain post mortem either microscopical or chemical except perhaps occasionally in long standing cases some diminution in the weight of the brain or a slight chromatolysis of the largest cells of the cortex. Heredity is the strongest factor, and with it go the stresses and strains of life, alcoholism, toxins of acute or chronic disease, child bearing and even inanition. The Freudian view is that the basis of the psychosis is repressed Sado-Masochism. The patient unconsciously hates some person (usually a near relative, father, mother, husband, or wife) whom he may consciously appear to love. This hate engenders a desire to punish the hated one but the patient identifies himself with the object of his hatred and turns the hatred and punishment on to himself. In short his super ego (conscience) upbraids his own ego. Thus follow the self punishment, self-

reproaches, delusions of wickedness, unworthiness, etc. and a tendency to suicide. The euphoria or excitement of mania is a symbolical triumph of the patient over his conflicts or object of his unconscious hatred. The position of superego and ego is here reversed. The ego here holds the field and is self sufficing and elated. Triumph may be replaced by anger but in either case the patient is unable to know why he is elated or angry.

Mania: is the excited stage of the psychosis and is a state of exaltation or elation which is out ef proportion to the circumstances. The entire organism, physical and mental is in a state of over stimulation or excitability, and as a result all mental and bodily processes are over active.

Physical signs The patient is restless and overactive and constantly wants to do something. Being exalted he enjoys every minute of the day, runs about, shouts and sings. He may be destructive and violent, assault those near by or dance and prance with them. His actions are mainly purposeless and though he states he is, and appears to be, healthy and virile, his physical health is far from good. Habits may be degraded from loss of control. He may go about nude or adorn himself grotesquely and is untidy and dirty. Facial expression is one of self satisfaction. Writing is large, untidy and copious. The secretions are all increased, polyuria, hyperidrosis, excessive salivation and hyperacidity of gastric juice. In females menstruation is irregular and in excess, and at lactation, mammary secretion is increased.

Often excitement is increased at the menstrual period. In general Katabolism exceeds metabolism and health is impaired from lack of nutrition, excessive energy and lack of sleep. Pulse is quickened, tongue coated, breath foul, appetite poor, or he may eat voraciously, Constipation is usual.

Central nervous system. The reflexes are all brisk, all the special senses are acutely alert. Coarse tremors of the face and hands when present indicate exhaustion. Skin is hyperaesthetic. This probably accounts for the nudity of some patients.

Mental symptoms—The mental state can be summed up in one word—"exaltation". His stream of consciousness flows rapidly, giving rise to the typical flight of ideas. This is helped by hyperprosexia (increase of attention). Every object and movement in the environment draws his attention and stimulates ideas. The association of ideas is so rapid that conversation is jumbled and incoherent. He speaks in rhymes and puns or uses "Slang" phrases. These are 'short cuts' in the train of thought. He may be witty, impudent, and abusive. The instincts and emotions are uninhibited, hence he becomes indecent in behaviour, resistive aggressive, noisy and destructive, "wet and dirty". The veneer of good breeding is removed, hence he sinks to the level of the baser animal instincts. He will laugh and shout heartily one moment and cry the next, becomes effusive towards utter strangers, while he ignores or disowns his nearest and dearest. The feeling of well being gives rise to delusions of power, strength wealth and grandeur.

But these delusions are ever changing and fantastic. Although there is disorder of judgment and lack of insight there is much apparent lucidity. Memory and perception are acutely stimulated. Recent and even remote events are remembered in detail. Orientation too may be quite good. Hence one should be cautious what is said in the patients hearing when in this state.

Owing to the stimulation of the special senses hallucinations are a common result, the aural being the commonest. Insomnia is the rule and has to be overcome to prevent exhaustion and

hasten recovery. The differential diagnosis from Katatonic excitement is given previously.

Prognosis: is good for the attack. Relapses are common but no definite length of lucid internal can be predicted. A case of acute mania, an old lady of 60 has been known to remain normal after recovery for 8 years. Dementia may follow several attacks.

Treatment: In the home it may be most difficult besides being undesirable, to treat an acute case. If the relations are prepared to undergo the expense, at least three trained attendants to watch and restrain the patient's movements by day and night will be necessary. Never lock a patient up but he should be isolated. He must be prevented from injuring himself or others, hence restricted to bed, but without mechanical aid. Nourishment must be good, sustaining and regular. Mental excitement must be controlled by sedatives.

The most reliable drug is Somnifen (Roche) given in 30 minim doses T.D.S. orally or 2 c. c. injected intramuscularly B.D. Amyleme Hydrate in 1 drachm doses is also useful. Paraldehyde in 2 drachm doses is preferable as it is less depressant but is disagreeable to take. Nasal feeding may have to be resorted to when food is refused. The bowels must be kept open by aperients or enemata. If there is no immediate improvement it will be imperative to remove the patient to a mental hospital where there are greater facilities for care and control. If the patient is very noisy and boisterous the best thing for both motor and mental excitement is Hydrotherapy. The patient is immersed in a special tub containing warm water (90 to 95 F.) and this temperature kept constant. Keep the patient in it from 6-10 hours daily. Constant attendance is necessary. He can be fed in the bath and at the end of the period given a sedative, Pot. Bromide grs. XXX or Amylene Hydrate one drachm and then put to bed, There

is little danger of contracting pneumonia but on removal from the tub the patient must be dried and kept warm in bed.

If hydrotherapy is contraindicated it may be necessary to resort to prolonged Narcosis. By this method the patient is made to sleep continuously from 7 to 10 days. Sodium Amytal injections I. V. (1 c. c.) are the safest as it is not toxic. Begin by giving the patient a pint of milk, empty the bladder and rectum and put him to bed on a low bed, in a quiet darkened room. Inject Sodium amytal 1. c. c. or Somnifene Roche 2 c. c. intravenously. To hasten the action of these an injection of Morphia ¼ gr. or Hyoscine Hydrobromide 1/100 gr. is useful. Sleep for 6 to 8 hours will follow. As soon as the patient wakes another injection of somnifene (2 c. c.) or sodium amytal 1 c. c. is given, after giving the patient some liqnid nourishment. The patient must be watched constantly. If the temperature rises to 100. 4 F. or 101 F. the treatment must be stopped. Each case must be treated on its merits, and though the patient usually loses weight there is marked mental improvement at the end of the course. Straight jackets and padded rooms are out of date and worse than useless. Attend to the general physical condition and maintain strength with nourishing food. Even in the excited state suitable occupational therapy may be prescribed with benefit. Ward discipline and correct habit formation by nurses also helps a patient to adjust himself. Visitors must be debarred for the time till the excitement abates.

Varieties of Mania.

(a) **Simple Mania**—Is a mild form of excitement with little motor activity. It is often preceded by depression. The chief signs are increased irritability, garrulity, emotional instability and in some cases a tendency to alcoholic excess. The patient has little insight, is cocksure and boasts of his mental and physical

powers being perfect. His actions and speech however lack purpose or sequence.

(b) Acute Mania has been described above.

(c) Acute delirious (Bell's) Mania.

The condition is toxic in origin and is allied to acute confusional imanity. It occurs most often among young males of the educated class. Physical and mental stress with a heredity predisposition are precipitating factors. The physical signs are those of an acute infection viz. loss of weight, fever, rapid pulse furred tongue, constipation, tremors and a general "typhoid" state. The mental symptoms begin with loss of concentration irritability, insomnia and restlessness. In a few days the excitement, confusion, noisiness and violence increase and exhaustion and the typhoid state set in. In two or three weeks recovery sets in after very careful nursing, but exhaustion may be extreme and often pneumonia hastens a fatal end.

Prognosis is bad, as the exhaustion, the onset of pneumonia or bed sores are the main dangers.

Treatment—Careful nursing is essential. The patient must be restricted to bed, a mattress on the floor or a low bed is preferable. Nourishment must be adequate to maintain strength, tube feeding may be necessary after washing out the stomach. Collapse will require rectal salines. Insomnia and restlessness must be checked with sedatives as morphia, Somnifene, paraldehyde or amylene Hydrate.

(d) **Chronic Mania**—Here the same symptoms as acute mania are present but in a milder form. They begin in an acute form and gradually the symptoms subside but instead of proceeding to recovery, persist for months and years. Though they soon settle down to institutional life and discipline they are restless, loquacious, interfering and delusional and often a positive nuisance to all

they come in contact with. They are liable to acute exacerbations from time to time but gradually become more demented. Hypermnesia or exaltation of memory is often a characteristic feature.

Melancholia.

Is the depressive stage of the periodic psychosis and the state of misery or depression of the patient is apparently out of proportion to the circumstances. It is a magnification of the mood of depression which is normal in most persons at some time.

Etiology: a psychopathic family history is usual. Exciting causes are domestic, business, or social, worries or tragedies, chronic incurable diseases and in women, pregnancy, lactation and the menopause. This condition is essentially psychical in origin and in the psychoanalytical sense is an attempt at self-punishment by the "still small voice" of the super ego, for conscious ideas of guilt. Melancholia may appear by itself or follow an attack of Mania.

Physical signs.

The picture presented here is just the reverse of that in Mania. Instead of stimulation there is inhibition hence there is retardation of all activity. The patient may be rigid or immobile or he may make spasmodic movements of the hands and fingers or sway the body. An expression of intense misery accompanied with unconsolable weeping, a bent dejected posture and adduction of the large joints are the principal signs. Sensation is diminished but not truly anaesthetic, reflexes and circulation sluggish. Respiration slow and shallow, digestion and appetite poor, the tongue furred, breath foul, and constipation most usual. Males are impotent, females have amenorrhoea. Insomnia is invariably present.

Mental Symptoms..—Here the emotional disturbance is greater than the intellectual. The most prominent symptom is

depression which is intense. Thought is as laboured as movement and volition is in defect. The patient has no interest outside himself and is introverted. Perception and cognition are normal but attention is defective and leads to disorientation, and this in turn to slight amensia. He is full of gloomy thoughts and is concerned about his health and physical state. He reproaches himself for past misdeeds, declares he has committed the unpardonable sin and been thoroughly wicked or he anticipates some disgrace or catastrophe, death or torture coupled with fear and apprehension. Hallucinations, chiefly accusing "voices" are common. He weeps copiously and his grief is genuine. Any physical subjective symptom, or other external event is invested with objective purpose. A headache is said to be due to his brain having evaporated or read; a passerby who glances at him, may be a police spy etc. With this load of misery, guilt, fear, and desperation it is to be expected that the only way the melancholic seeks to escape from his terrors and tortures is to resort to suicide. **All Melancholics are Potentially Suicidal** Insomnia is invariable and troublesome. The conscience of the melancholic is directly opposite to that of the criminal, the one is ready to accuse himself as the other is unwilling to accuse. Varieties of melancholia.

1 Simple—
2 Hypochondriacal.
3 Stuporose—
4 Agitated.

1 **Simple melancholia** is a state of depression which varies from a 'fit of the blues' to a protracted state. The main feature is the preoccupation of the mind with gloomy, foreboding ideas and groundless fears. The patient's mental state may reveal no other abnormality and he is aware of his condition but is unable to shake off his doubts and fears in spite of his condition being explained to him.

2 **Hypochondriacal**: The patient complains mainly about his bodily health or fears he is suffering from an incurable desease. Every subjective sensation is magnified and he is a constant worry to his nurses and doctors and in spite of treatment and persuasion firmly believes that he is ill.

3 **Stuporose**.—Closely resembles Katatonic depression (q.v.) The patient is mute, and sits or stands about in an attitude of extreme misery. Both mental and physical rigidity are most marked in this variety.

4 **Acute Agitated**—In addition to the extreme depression the patient is constantly restless and agitated. The hands and feet are in continual action, rotated, twisted, and wrung, the body is rocked about or he rolls about the floor and is never still for a moment. The prevailing emotion is that of fear. Hallucinations and delusions are present. He moans, whines and laments his state in continual phrases as "What'll I do"; "How dreadful"!, etc. all day. It is rare in persons under forty. He has no insight into his condition and is indifferent to his ordinary ends. The blood pressure is much lowered but the surface tension of the blood is raised. It has been found that symptoms of acute agitation are usually associated with fibrosis or haemorrhage in the Pancreas.

Prognosis: An attack of acute Melancholia lasts generally about 6 months. The younger the patient and the earlier treatment is commenced the better the chances of recovery. If the physical signs improve but not the mental the case will become chronic. Dementia does not follow except in aged patients. Recovery may take place within six months to several years.

Differential Diagnosis: Katatonic depression has already been discussed.

The neurasthenic has good insight into his condition and his depression is much less. He usually seeks advice and help.

The physical signs of melancholia are absent.

Parkinsonism (post encephalitic) must be excluded, the mask-face, tremors, dribbling, and absence of fears or anxiety are points of contrast.

In epilepsy and General paralysis of the insane, phases of depression may occur, but the history of the case and Wassermann reaction and other physical signs soon dispel any doubt.

Treatment.—Institutional care will generally be found necessary and because of the danger of suicide which is ever present the earlier the patient is brought under control the better.

Hence the most important point in treatment is to remove the possibility of suicide. For this the patient must be watched very carefully most especially at night. It is in some unguarded moment that they suddenly take the chance. They should not be confined to a room and never left alone. Though rest is usually prescribed it is far better to allow the patient to be up and about. Suitable occupation must be prescribed for the first day or two in bed, and then in the general ward or class rooms. Exercise, amusements, walks, all help him to throw off his moodiness and stimulate some interest. Nourishment must be regular and plentiful. Cases that are very agitated will be benefitted by a short course of hydrotherapy. Combat insomnia with sedatives. A course of prolonged narcosis is of help in some cases. Malarial therapy has also been found effective in some cases just as in general paralysis, but it is doubtful if glandular therapy has any effect. In milder cases, who can co-operate, psycho-analysis may be tried, but firm persuasion, encouragement and suggestion are beneficial in most cases who are not too delusional or hallucinated. Even in the stages of apparent recovery be careful of the tendency to suicide.

CHAPTER VI.

Paranoia.

Also known as systematised delusional insanity, is a progressive mental disorder characterised by fixed and unshakable delusions which are collected together around a particular nucleus or phase of the patient's life. The delusions occur through the mechanism of projection.

Etiology—It occurs mostly in males of middle age in whom there is a psychopathic family history. The onset is very insidious and it may be years before symptoms are manifest but from childhood there is usually a history of being eccentric, suspicious, irritable or peculiar. Freud's theory is that the disorder is due to repressed homosexuality. This trait being intolerable to his nature the patient projects his thoughts on to others. Though this is essentially true for males, in the case of females, repressed incestuous ideas are more often found than homosexual ones.

Physical signs: There are no special characteristics. Stigmata of degeneration are not noticed, usually the physical state and health is perfectly sound.

Mental state : By the time a patient has been certified to institutional care the disease is usually firmly developed. This is because advice is rarely sought, for, in the early stages the patient may pass easily for one of his normal, average, companions or fellow-citizens. In the early stages both conduct and intellect are unimpaired. Paranoia is a condition of disordered judgment about some particular idea or activity, hence apart from the delusion about this particular idea and activity there may be little else in conduct or conversation that will certify him as insane. Just as a complex is stimulated by a particular association of ideas, when the paranoiacs particular delusion is touched upon, is

the evidence of disordered judgment clearest. Sooner or later his conduct is influenced by the delusion. No amount of argument will convince him of his irrationality and he will try to justify his delusion by the most ingenious deductions or explanations which though rational the premises are not. They are unable to see any absurdity in their delusion. There is little evidence of mental enfeeblement, defect of memory, confusion or incoherence, Those who submit to their delusions and accept them calmly as a matter of course are knowm as the "Resigned types" but those who react to them with violence or outbursts of temper against others are known as the "fighting" types.

Paranoiacs are divided into two classes:—

Eccentrics (Mattoids) are those harmless peculiar persons who are full of fads, the unpractical altruists, "Cranks" about food, religion, polities, art, education or any conceivable subject They are not antisocial but usually 'bores' or a nuisance whom everyone wants to avoid once they have met them. They are practically borderline cases, hence are not certifiable.

Egocentrics: They are the true paranoiacs. As the delusions are stronger and more concerned about themselves or their affairs they are more dangerous to society against whom they react. According to their delusions they are subdivided into:

Amorous— This type imagines some person of the opposite sex or even of the same sex is in love with him and in spite of every rebuff tries to follow or force his attentions on the object of his regard. Usually he is soon told to desist and his love turning to jealousy, may induce him to attack, even fatally, his victim.

Litigious: The patient believes that he is the victim of a plot and takes legal action against his supposed enemies. The sligh-

test excuse is sufficient to take him to the courts where he usually exhausts his income.

Religious: All the delusions are tinged with religion. The patient believes he is a chosen servant of God. The new Messiah, or reincarnation or he interprets any religious code or dogma as having special reference to him. From this develop ideas of grandeur or of a persecution and so he poses either as a saint or a sinner.

Hypochondriacal: The patient is either in sound physical health or has some trifling malady and so imagines he is the victim of an incurable disease. All his complaints are about his bodily functions and he constantly seeks advice and takes every quack nostrum he reads of. The delusions may lead to grave depression and even suicide. Often his condition is ascribed to poisoning by supposed enemies.

Exalted: These paranoics are much like the Religious except that their ideas of grandeur are more mundane than spiritual. They believe they are of Royal descent, heir to a throne or possess vast wealth but have been defrauded of their rights. This in turn leads to ideas of persecution.

Psychopathology: Freud was the first to discover that the basis of paranoia is repressed homosexuality. The idea of being a homosexual is more repugnant to those with that trend than with most normal persons. Hence they banish it into the unconscious; but when the repressive force is not strong enough the tendency or complex manifests itself in a disguised form i.e., paranoia. The mental mechanism of the varieties mentioned above can be explained as follows. The homosexual idea "I love him" or "he loves me" being repugnant in the case of the amorous paranoiac is converted or rationalised into "I love her" and this

by projection into " She loves me ,'. Hence his attentions to some woman. In the case of the litigious the idea " I love him " is changed to " I hate him " hence the law suits.

The religious paranoic changes the essential idea " I love him " into " I love Him " and this by projection becomes " God loves me ", " I am the chosen one ". The hypochondriacal converts the intolerable " I love him " into " I do not love him but myself ". Hence " I must look after myself " leads to preoccupation about his health. The exalted turns " I love him " into " I love myself and the world loves me. Hence I am a great person".

Although homosexuality is common in both the sexes and is the basis of paranoia, I incline to the view that in the case of female paranoiacs an incestuous trend or fixation is commoner and stronger than homosexuality. As Incest is as abhorent as homosexuality, it undergoes the same repression, and the mental mechanisms by which it eventually is manifest follow the same plan as given above, the male parent being substituted in all cases for "him". Paranoic females are usually spinsters.

Differential diagnosis—

Dementia paranoides occurs at an earlier age, the delusions are bizarre and not closely connected. Hallucinations are common and also mannerisms antics and stereotypy. Dementia supervenes early.

Alchoholic Paranoia. The history of alcoholism and the physical signs are important. Improvement usually follows abstinence. The delusions are usually of marital infidelity.

General Paralysis : Grandiose or persecutory delusions in a middle aged person should always arouse suspicion. The physical signs and a positive Wassermann reaction in the blood and cerebrospinal fluid clinches the diagnosis.

Prognosis—The condition is progressive but there is no tendency to dementia. Life is not shortened. Conduct becomes more antisocial. Most homicidal maniacs are paranoics.

Treatment: Beyond certification for his own care and control or to protect society, there is no special treatment. As they have no insight no amount of mental analysis, persuasion, or reeducation will be of avail. An outlet for their energies may be found in useful occupational therapy.

They usually work with meticulous care and precision. An annoyed or thwarted paranoic may become suddenly violent and homicidal. Such require tactful and careful handling.

CHAPTER VII.

The Toxic Psychosis.

The basis of drug addiction in the light of Freudian psychology is (1) fixation to a transitional Oedipus system, i.e., a system lying between the more primitive Oedipus nuclei that produce paranoic or Melancholic anxieties, and the Oedipus nucleus that produces a later obsessional neurosis.

(2) The libidinal components found in drug addiction are stronger and contain more genital elements than those found in the obsessional neuroses.

(3) It acts as a protection against psychotic reaction in states of regression.

(4) The close association of homosexual interests and drug addiction represents a defensive or restitutive mechanism.

(5) The drug symbolises excretory substances which in turn represent a primitive, uncontrollable form of excretory sadism,

This group of mental disorders is so called because it is the result of toxins, organic or inorganic that invade the system which succumbs to the effects. In addition to the invasion of the poisons, there is usually a predisposing psychopathic inherited weakness. Not all persons exposed to exhausting physical or mental stress, privations or long periods of intoxication succumb to mental disorder whilst others react to the slightest infection.

This group is classified (according to Craig and Beaton) into the Endogenous and the Exogenous—

I. **The Endogenous** :—

(a) The insanities dependant upon metabolic disturbances, the psychoses of pregnancy and the puerperium and the psychoses, resulting from starvation and physical exhaustion.

(b) The psychoses dependant upon toxic accumulation-Viz-nephritis, diabetes etc. (See Chapter XI.)

II. **The Exogendus :—**

(a) Psychoses associated with drug states.

(b) Psychoses associated with infections (see Chapter XI.)

The alcoholic psychoses belong to this toxic group but in following the time-honoured custom are described separately.

The toxic group produces the largest member of admissions next to the Biogenic psychoses.

Etiology—In addition to a predisposing psychopathic instability the presence of toxic substances, manufactured in, or injected in the system produces the disorder, the outstanding symptom of which is confusion in some degree or another. Apart from the toxaemia of pregnancy and the puerperium, the sexes are about equally affected.

General Characteristics.

Physical signs—The patient is thin anaemic and in poor condition. The skin is dry and scaly, tongue coated, pulse rapid and blood pressure low. Fever may be present, urine is scanty-constipation is usual and the menses scanty and irregular, anaesthesia and muscular weakness are also present.

Mental Symptoms.

The earliest symptoms are insomnia, inability to concentrate restlessness, and irritability. The patient feels he is unable to attend to his daily routine and this leads to depression, later, consciousness is clouded, he is vague as to his identity and becomes disoriented in time and place. Owing to disturbed association of ideas, conversation becomes incoherent and disjointed. Perception is disturbed and ideational inertia (i.e. in ability to

form new ideas as various percepts are presented or conceived,) usually follows. The result is illusions and hallucinations are present. Memory for recent events is much reduced. The emotional tone may be one of depression or hilarity and varies from day to day and often the same day. From loss of higher control obscene speech and conduct follow. The excitement or depression that is met with in these toxic psychoses must not be mistaken for that of Manic Depressive Psychoses. The points of difference are, the acute confusion which is not met in Manic Depression the marked apperception, amnesia and the physical signs of exhaustion.

Prognosis: The more acute the infection the greater is the typhoid state. Collapse or pulmonary infection ushers in a rapid end. Most cases with careful nursing recover within a year. 80% of cases recover. Elderly persons and those who are persistently destructive and degraded have a bad prognosis.

Treatment: Since rest and constant careful nursing is essential the patient must be removed to a hospital. Having examined the physical state, attack any source of infection (Sinuses, bowels, skin, teeth, kidneys). The Physical state must be improved by rest, nourishing food, tonics. Restlessness and insomnia must be controlled by sedatives as Somnifen, Hyoscine or Paraldehyde also by hot packs or hydrotherapy. Cleanliness and instilling good behaviour calls for strict ward discipline and habit correction. Amusements as well as suitable occupational therapy will be necessary during convalescence.

I **Endogenous.**

Psychoses associated with Pregnancy—

Pregnancy should be avoided by persons who are themselves neurotic or unstable or who come from psychopathic stock, for it

is just such who succumb to the mental or physical strain of child bearing or to the toxaemias that may accompany that state. There are three groups of this psychosis:—

1. **Insanity of pregnancy**—2. **Puerperal insanity proper.** 3. **Lactational insanity.** This division only indicates the period when the psychoses appears and not three different clinical conditions. The mental state in all is much the same as in confusional insanity and may be associated with mania or melancholia.

Etiology: Neuropathic defect which springs from bad heredity or other vitiating cause is the basis of mental disorder at this state of life, not pregnancy per se. In normal persons the first pregnancy is a time of greater anxiety than subsequent ones. More so is it among the neurotic especially if the 1st pregnancy is after the thirties. Combined with this there may be physical weakness or exhaustion, an infection or toxaemia of pregnancy Illegitimacy is also a serious factor, as also death or desertion of a husband. Prolonged and painful labour is also a factor. Alcoholic intemperance or syphilis may predispose. Some women break down when bearing children of one sex only.

Symptoms:

(1) **Pregnancy**: Melancholia or a state of depression is most usual and greatest in the morning. Insomnia and restlessness are early signs, then the patient becomes capricious, neglectful of her person or her duties. Delusions appear, either self accusatory or against the husband. Suicidal impulses may exist. Mental disturbance after the fourth month is usually graver than before it. Induction of abortion or premature labour is not advisable except to save life.

(2) **Puerperal**. There may be great excitement at the time of delivery which is delayed owing to motor restlessness. Injuries

to the mother or child may occur. Usually there is increasing restlessness and insomnia till about 3 or 4 days after delivery when the patient appears confused, indifferent to child, husband, friends, talks incoherently has hallucinations and delusions of persecution. Depression is not so usual. The excitement is usually acute, food is refused and the patient is restless and noisy or even violent. Breast abscess sometimes follows if the breast is not carefully tended or emptied. There is usually a rise in temperature, the pulse is rapid, the lochia often quite normal and the patient has a dry furred tongue, and sordes on lips. Constipation is usual. Complications may set in such as, breast abscess, retention of urine, pyelitis, endometritis, cystitis, anaemia and even convulsions,

Infanticide may be attempted. At the first signs of any mental disturbance remove the child, for both their sakes. Usually recovery sets in in a week, and may relapse, but more often cases take 3 to 6 months to regain the normal state. In some younger patients dementia praecox, supervenes and then the course is progressive.

(3) **Lactational**—So called because mental disturbance occurs during lactation which is said to produce or precipitate the condition. It therefore may occur at any period after the puerparium till weaning. The mental symptoms may be the same as the above. Depression, restlessness, insomnia delusions against husband, child, hallucinations etc. Rest, feeding and weaning usually help to an early recovery. Some may go on to dementia praecox.

Treatment: Is on much the same lines as for the other toxic psychoses. Attend to the physical state. Remove all sources of toxaemia. Rest, good food, sleep and nursing are the main requirements. Before birth do not induce abortion except when there is grave danger of life of parent or child. After birth isolate

mother from child and relatives. Guard against suicide. If the case cannot be treated at home remove to a hospital and admit as a voluntary patient preferably.

II Exogenous—

PHARMACOTOXIC PSYCHOSES-DRUG ADDICTIONS.

CANNABIS INDICA.

This drug is in common use throughout India, in the form of Ganja, Bhang, or Charas. The dry powder is either smoked or decoctions are made from them—Hashish is a confection more commonly used in Egypt and Arabia and is made from Charas. Most admissions into Indian Mental Hospitals are traceable to this drug addiction. Physical signs of acute intoxication are flushed face, rapid pulse, hyperaemia of the conjunctiva, dilatation of the pupils, increased muscular activity with diminution of sensation.

Mental Symptoms: At first there is giddiness which is replaced by a feeling of ecstasy, then the subject becomes excited loquacious and even violent. In this stage he may run amok. Visual and auditory hallucinations mainly erotic occur, this is followed by mental confusion ending in drowsiness and deep sleep. On waking there is amnesia for all but the initial stages. This amnesia which is genuine is of considerable medico-legal importance. The types of psychoses that result from habitual addiction are (1) acute mania. (2) chronic mania and (3) dementia. Clinical picture is much the same as the ordinary forms of mania with the following differences.

(1) **Acute forms**: (a) History of drug habit but no psychopathic history.

(b) Visual and auditory hallucinations are highly erotic.

(c) Shorter duration of attack, recovery usual and relapses uncommon.

(d) Complete amnesia of all events on recovery.

(e) A characteristic bravado and strong impulses. to violence

(f) marked conjunctival congestion in the horizontal vessels of both eyes. This is a constant sign.

(2) **Chronic forms.**—The symptoms are the same as above but less severe. Complete loss of speech lasting for some years after recovery from the acute stages of intoxication has been reported in some cases. It is usually regained. Few cases end in dementia.

Prognosis.—99% of acute cases and 40% of the chronic recover under treatment and abstinence.

Treatment.—This is mainly symptomatic. With abstinence, rest, sleep and nourishment recovery soon follows. Hydrotherapy is useful during much excitement.

Morphinism.

The morphia habit usually starts when the drug has once been taken for insomnia, neuralgia or other physical condition. Doctors, nurses and druggists form a large portion of addicts. Some individuals are more prone to become addicts than others especially psychopaths and neurotics, proving that as in alcoholism and other drug habits an underlying psychic factor is operative. In India the habit is confined to young persons between the ages of 20 to 35, because of its supposed aphrodisiac properties. There is no characteristic clinical entity that is the result of addiction. The symptoms of Morphinism may be considered under three heads.

(1) **Immediate action**—This consists of physiological and psychological effects.

(a) Physiological effects are, sedative action of the drug on the nervous system, contraction of pupils dryness of mouth; diminution of secretions. Hence arise dyspepsia, loss of appetite and constipation. Pain is rendered inocuous, and drowsiness and sleep follow.

(b) Psychological effects are temporary exhilaration and a sense of increased mental activity. Pain and worry both imaginary and real disappear, the brain is filled with pleasing fantasies and worries and troubles are forgotten. This is sometimes described as the "honey-moon" stage and it is chiefly for this effect the drug is taken. Some persons make firm resolves to avoid the drug but the struggle is ineffectual.

(2) **Habit proper**: This is usually indulged in secret and gradually increasing doses are taken. The first noticeable effects are a gradual failure of mental and moral faculties. The addict becomes dull and indifferent negligent of work and home, unreliable, depressed and notoriously untruthful. He stoops at nothing to get the drug which is life to him. Gradually his physical health suffers, he becomes thin, haggard, and anaemic, circulation and alimentation are sluggish and tremors of face, tongue, and hands appear. Intellectual deterioration is followed by depression and passes on to dementia. Depression and confusion may be so marked that he has to be certified which is the best thing that can happen to him.

(3) **Abstinence symptoms**—Deprivation of the drug is followed by utter exhaustion and misery, absolute insomnia and restlessness and suicidal tendencies. Cramp like pains in limbs and stomach, increased salivation and vomiting are common.

There is excessive irritability and hyperaesthesia, pulse rate rapid, palpitations and syncopal attacks. One injection of mor-

phia brings immediate relief, proving that the abstinence symptoms are the result of liberation of antibodies formed in the system.

Diagnosis: is easy with a true history, but it is often hidden. The puncture marks on the body, commonly the left arm, give the patient away and still more so when the drug is withheld, for he craves for it and abstinence symptoms follow.

Treatment: is very difficult. In only 10% of cases can permanent recovery be expected, and only those with a very strong determination can ever overcome the need. Relapses are common as the drug leaves a firm grip on its victims; whose volition is much weakened. Each case must be tactfully handled and the best practical method is to cut oft the drug gradually by diminishing the dose and then substituting another for insomnia, and gradually that too is stopped. Sudden stoppage brings on abstinence symptoms and does not in the long run effect a cure. A good deal of success can be derived from psychoanalytical treatment; since the basis of morphinism is to overcome some conflict by flight from reality. During treatment every precaution must be taken that the patient does not get the drug illicitly.

Cocainism.

The factors underlying cocainism are much the same as in the other drug habits. The vice is very common in the East but is increasing in the West in spite of utmost vigilence. It is in common use in brothels and gambling dens and frequently associated with morphia. Insanity as the result of cocainism is rare. In the Ranchi European Mental Hospital no case of cocainism was admitted during the past 15 years. Nevertheless its effects on the central nervous system is so devastating that

the following stages should be considered. The immediate physiological results are relief of pain, hunger and fatigue, dilatation of the pupils, rapid pulse and increase of secretions. On the mental side there is euphoria, intellectual stimulation and alertness with rapid flow of ideas. The end results of addiction are a general moral and mental deterioration, hallucination of sight and sensation (cocaine Bugs) delusions of persecution, amnesia and paramnesia. The abstinence symptoms are formication of the skin of arms and hands, neuralgic pain and cramps, tremors, irritability, insomnia and acute depression. Collapse may ensue.

Treatment is on the same lines as with morphia and equally difficult. Relapses are common, even after long periods of abstinence.

Alcoholism.

Alcoholism and insanity are closely allied. Alcoholism is the result not the cause of Neuroses. It effects both the individual and his offspring and brings in its train inebriety, idiocy epilepsy and insanity. The average person takes alcohol because it is a stimulant and induces a mild temporary euphoria sufficient to overcome fatigue as an aid to renewed activity, to "enliven ones spirits" and in short to combat mental stress and forget the world and its worries. This gradually develops into a habit and may lead to chronic alcoholism. As in the drug addictions the raison d'etre for taking alcohol is that it induces a flight from reality and is a refuge from mental conflict for a short time. Hence the common expressions "cheerio", "drowning sorrows" etc. Alcohol is the shortest and cheapest route away from reality, prohibit it and man will take to harder and more harmful ones. The effects of alcohol on the mind depend upon the quantity and quality of the drink and upon the personality of the drinker.

It may be intolerent to some while others may drink with impunity. Persons who are neurotic, epileptic, aments, or have suffered from sun stroke or head injuries are less tolerant. Next to heredity, alcoholism is the greatest etiological factor in the causation of insanity, at the same time alcoholism may be a sign of mental disorder and result from loss of higher control which is often the first symptom. The psychoanalytic view of alcoholism is that the keynote of the problem is faulty psychosexual development in general, which causes the craving for drinking is to satisfy the erotogenic mouth zone. It is a regression to an infantile level where there is a transference of libido from the mothers nipple to the bottle. In the unconscious alcohol equates with semen. Alcohol releases latent homosexuality and produces in the normal man signs of conscious homosexuality.

McCurdy declares "The alcoholist is, before he even touches a drop, an abnormal person". He suffers from an inferiority complex which his conviviality covers. The physiological effects of alcohol or of ordinary intoxication needs no description here, as this is a familiar clinical picture. The effects vary with each individual. As the inhibition of the higher centres of control occurs he may become jovial, rowdy, generous, affectionate, quarrelsome and depressed or lachrymose. In general, steady "tippling" is more likely to lead to chronic mental disorder than occasional bouts or "alcoholidays". The different types of mental disorder resulting from alcoholism are :—

1. Mania â potu
2. Dipsomania
3. Delirium Tremens
4. Korsakow's Polyneuritic Psychoses
5. Alcoholic Pseudo-paresis
6. Alcoholic Paranoia
7. Chronic alcholic Hallucinosis.

(1) **Mania-â-potu** is a form of acute alcoholism. During the short attack of excitement which rarely lasts more than three or four days, the patient may become most violent and homicidal. Suicide may even be attempted. Hallucinations are rare but he is extremely exalted and extravagant. The physical health is usually good. Tremors and incordination are present as is also insomnia. This condition is of much Medico-legal importance.

Treatment: Removal to a Home or hospital may be necessary. With gastric lavage, rest, sedatives for sleep and cardiac stimulants patients usually recover in a few days or within a month.

(2) **Dipsomania**: is periodical bouts of heavy drinking. There is a strong compulsion to drink which cannot be resisted. The craving is satisfied after a few days excess and then left off with loathing and regret.

It is a form of obsessional neurosis and the object may be to repress some conflict. Between the bouts the patient is quite temperate for weeks or months.

(3) **Delirium Tremens** (D. Ts.) is an acute delirium of a few days duration accompanied with fine tremors of the face, tongue and hands and usually met in chronic alcoholists. It is not the result of a single bout. It is liable to occur in alcoholics after an accident, operation, or acute illness and even when alcohol is withheld or given up for some weeks. Hence the name "abstinence delirium" sometimes applied. Thus it may be that the symptoms are the result of abstinence on the theory that during abstinence the antibodies of alcohol are liberated in excess and produce poisoning. As in the case of morphia and cocaine the symptoms can be relieved by a small dose of alcohol. The premonitory signs are insomnia, restlessness and irritability.

The physical signs are congestion of the face and conjuctiva, offensive breath, furred, tremulous tongue, constipation and loss of appetite. There may be pyrexia, at first, the pulse is full and bounding but later feeble. Motor restlessness and agitation is followed by muscular weakness and tremors of the face, hands and fingers. Articulation is disordered and feeble. The urine is diminished and may contain albumen.

Mental symptoms—The patient is much confused and in a state of anxiety which may extend to intense terror. This is due to strong visual hallucinations of snakes, devils or animals which terrify him. These hallucinations and illusions are also known as the "Horrors". There is complete disorientation in time and place. Perception and cognition and memory are also disturbed. Recent events are beyond recall, he may even forget his name and after recovery there is total amnesia of the illness. The anxiety and motor restlessness may be so acute that the patient even if seriously ill rushes out of the room and turns homicidal or suicidal. Speech is incoherent and rambling and he is usually noisy. Some patients have an "occupation delirium", i.e., they imitate in imagination the actions of their daily trade or occupation. Finally there is complete insomnia.

Prognosis: Except for the danger of collapse in the acute stage or the complications of any underlying disease, the prognosis is good as recovery usually takes place in a few days.

Treatment: Confine the patient to bed, with restraint if necessary, in a dark quiet room with a nurse in constant attendance. If he cannot be treated in his home remove him to hospital. Liquid nourishment such as soups milk, cocoa etc. should be given frequently in small quantities. To overcome restlessness, excitement and insomnia, he should be tried first with hydrotherapy for

a few hours. Gastric lavage and tube feeding may be done now. Note the pulse condition constantly. After removal from the hydrotherapy-bath administer a hypnotic to induce sleep. Somnifen one or two c.c. given intra-muscularly, or Amylene Hydrate 1-2 drachms will be most usetul. Hyoscine 1/100th grain is beneficial and is borne well. If and when there are symptoms of collapse which may appear early or about the 3rd and 4th day, give smal doses of brandy frequently. It may even allay symptoms when given at the onset and must be with-held as the condition improves.

(4) **Korsakows Disease**—Also known as polyneurotic psychosis is a mental disorder associated with peripheral neuritis and is the result commonly of alcoholic excess or poisoning by arsenic, mercury, or lead. It may occur after typhoid fever, influenza or diabetes. Women are more frequently affected.

Physical signs: The peripheral neuritis is of the usual type and appears at the same time as the mental symptoms. There is acute pain along nerve trunks, in the arms and calves; with superficial tenderness in upper and lower limbs. The deep tendon reflexes are absent and there is wrist and foot drop. The muscular weakness in addition produces a tottering gait and ataxia.

Mental Symptoms: The onset may be like that of delirium tremens and when the acute stage has passed off the true picture of Korsakow's syndrome is manifest. The most characteristic and constant feature is paramnesia or confabulation. This consists of fictitious memories by which the patient invents incidents which may be plausible but are purely imaginary. This paramnesia can be influenced by suggestions. For instance if asked "Did you receive a parcel to-day?" he will admit it and give a detailed description of the contents and sender of the imaginary parcel. To-